

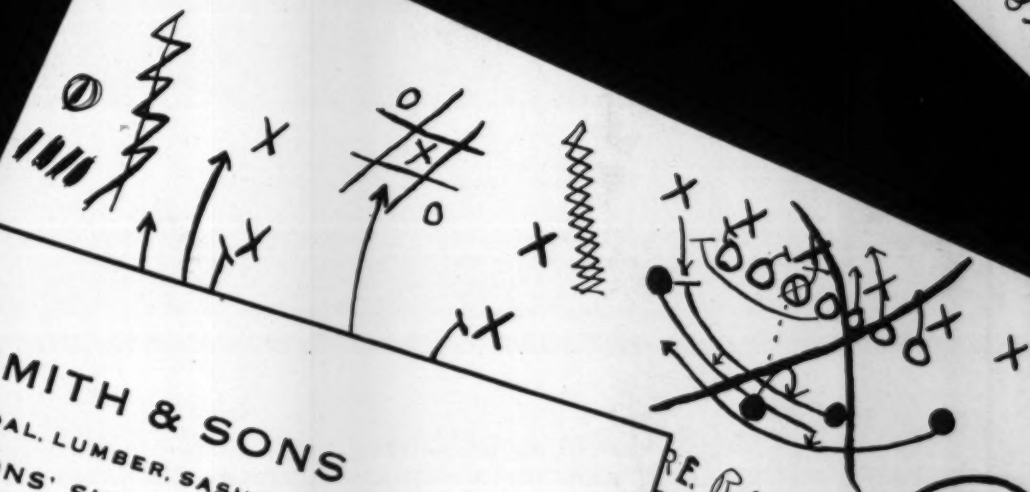
SCHOLAS COACH

OCTOBER

Although the difficulties we have overcome the best we have ever had
Arthur Gorman
 1935

MEMORANDUM
 OCTOBER 3

See principal about
 Steve Smatch
 Soap for showers
 Referee
 Doc Dunn
 tickets for (G)
 also get



J. B. SMITH & SONS
 FRED. COAL, LUMBER, SASHES
 MASONS' SUPPLIES

Wed. Oct. 2, 1935.

ch
 As an old alumnus of
 and an interested spectator
 day's game, I would
 a few suggestions.
 it want to manage
 t here

RE. Robinson
 PT. S. Jensen
 G. Kammerer
 C. King
 G. Larkin
 T. Wright
 E. Watson
 O. Neil
 P. Good - not good enough
 H. O. Lary
 H. Gould
 FB P. Shortridge
 K. Whitner
 e best offense is a good defense
 nuts

Oct. 2.
 Dear Coach:
 Here is a play
 with work wonders for
 If you think
 any m



*Spalding recommends the best-behaved
basketball ever made*

The 1935 LACELESS BALL!



**NO more juggling to get the
lace on top . . . No more dan-
gerous delays!**



NO more uncertain balance!



NO more hoo-doo bounces!



NO more dead spots!

HERE'S cause for rejoicing—the basketball's lace and opening are gone! Now the basketball's as devoid of lacing as a tennis ball . . . a perfect sphere without blemish—and the best-behaved, most controllable ball of all time.

Two things make it possible—the perfecting of an efficient modern valve, and the great advancement in the construction of the bladder, an advancement that gives to the bladder durability almost equal to that of the casing itself.

These features banish the need for lace and opening. Now lace and opening themselves are gone

—and gone with them their vicious effect on balance and bounce.

In the new Spalding Official Laceless DL Basketball you get this laceless feature (licensed under Patent No. 1551099) *plussed* with Spalding's years of experience dating back to the production, by Spalding, of the first basketball. Plussed also with a cover of top-grade leather . . . and a rugged one-piece, perfect-ball-shape bladder.

Write for the new School and College Catalog which fully describes it. Address A. G. Spalding & Bros., 105 Nassau Street, New York, N. Y.



**It's Laceless
for better
basketball**

A. G. Spalding & Bros.

Postum is an ideal mealtime drink for athletes because it cannot produce any harmful after effects.

Francis A. Schmidt, *Football Coach, Ohio State*



I readily recommend Postum. It's a warm, delicious drink containing no caffeine.

James Phelan, *Football Coach, University of Washington*

ANOTHER STRONG LINE-UP FOR POSTUM!



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Harry Kipke, *Football Coach, University of Michigan*



Postum is a harmless beverage, containing no caffeine or other stimulant. It is to be recommended to all athletes.

Harry Mehre, *Football Coach, University of Georgia*



I heartily endorse Postum for all athletes and intend to use it exclusively in the future.

John F. Rourke, *Trainer, Colgate University*

FREE! As many trial packages of Postum as you need for your team and candidates. Also as many copies as you need of the new training booklet, "Tips on Four Major Sports." This handy sports manual contains fine authoritative articles on major sports, written by some of the nation's leading coaches. It is illustrated with diagrams showing basic offensive and defensive plays, and will prove of unusual interest to the boys on your squads.

Just fill in and mail the coupon. Postum is a product of General Foods.

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GC-10-35

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Kellogg's PEP Bran Flakes furnish the ready nourishment of whole wheat. The protein. The vitamin B. The helpful minerals. In addition, every bowlful of these crisp flakes supplies enough extra bran to be mildly laxative . . . helps keep the body fit and regular.

A bowlful of these better bran flakes, with milk or cream, is a well-balanced meal. It helps build muscles, strengthen bones, store up energy.

Suggest Kellogg's PEP Bran Flakes to your squad. An excellent breakfast for active young people. Good for the last meal before a game because PEP Bran Flakes digest easily and quickly. Recommended for the snack after practice. Always fresh and ready to eat. Sold by all grocers. Made by Kellogg in Battle Creek.

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BRAN
FLAKES**



FOR YEARS, the Kellogg Company in Battle Creek has been interested in helping as many young people as possible to enjoy athletic sports. In addition to making wholesome foods for active bodies, this company has printed a Kellogg Sports Library, put sports panels on Kellogg packages. Helpful information on popular sports. Eighteen different subjects relating to football—written by nationally known coaches.

There is a constant effort to educate young people in keeping fit and active. Developing the kind of bodies that coaches need to build winning teams.

Ready-to-eat cereals have an important place in training routine. Crisp, light foods digest easily . . . without burdening the system or making the mind "loggy." They release energy quickly. A bowlful of ready-to-eat cereal with milk or cream furnishes as much nourishment as many hot, heavier foods. With much less bodily effort.

Tune in *Kellogg's* COLLEGE PROM

A sparkling half-hour of song and rhythm. The thrills of sports. The excitement and color of a different campus every week! EVERY FRIDAY NIGHT, 8:30 (E. S. T.). WJZ coast-to-coast Network—N. B. C.

Kellogg's **PEP BRAN FLAKES**

SCHOLASTIC COACH

Reg. U. S. Pat. Off.

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JACK LIPPERT, Editor OWEN REED, Associate Editor

The editor will be glad to consider any manuscripts and photographs submitted to him for publication, if accompanied by stamped addressed envelope for return, if unsuitable.

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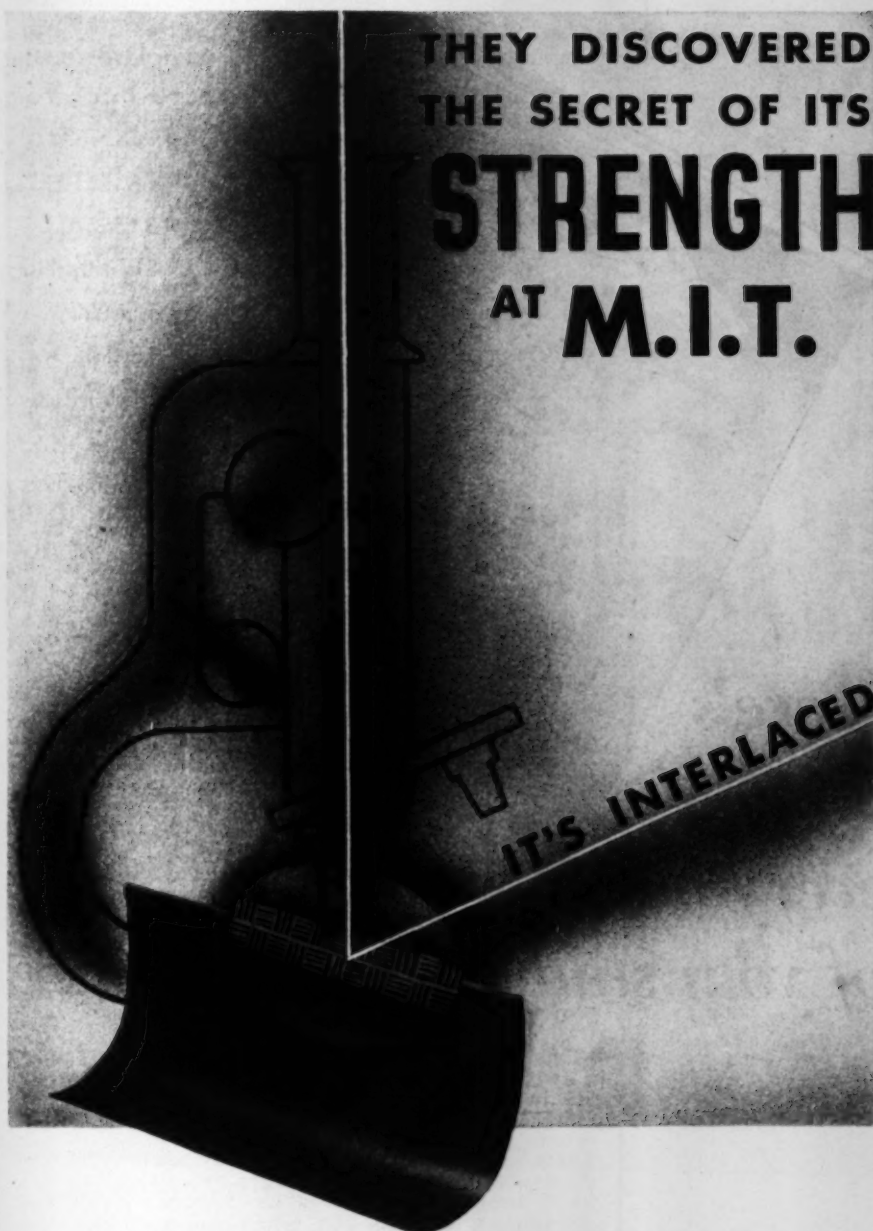


ROUTING SLIP

Cut this out and clip it to the front cover. After reading this issue, check your classification and write in the names of other members of the coaching staff who want to see the magazine.

- ☐ Principal
- ☐ Director of boys' athletics
- ☐ Director of girls' athletics
- ☐ Football coach
- ☐ Basketball coach
- ☐
- ☐

Return to:



For 40 years coaches and athletes have known that Kangaroo gave them a perfect combination of Strength and Lightness. But no one knew the scientific reason why Kangaroo surpassed all other leathers this way.

So samples of Kangaroo and of many other leathers were tested together in the laboratories of M. I. T.

Stretching and abrasive and breaking machines bore out the experience of the sport world . . . Kangaroo was 17% stronger, weight for weight, than any other leather. And the microscope showed *why* Kangaroo was superior!

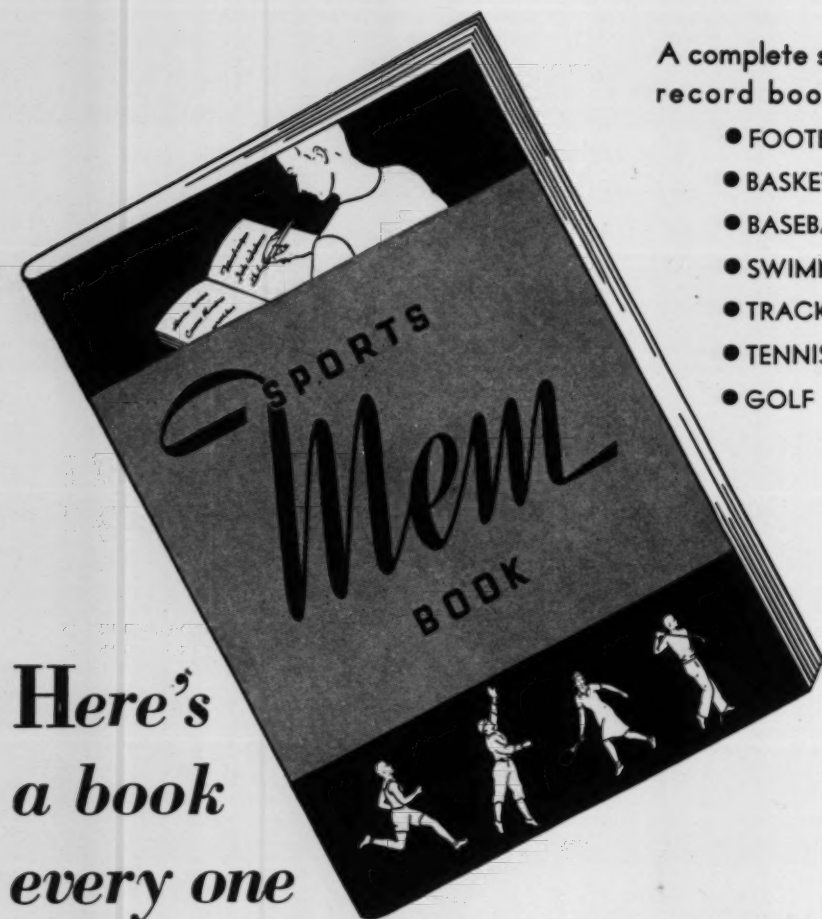
The fibres of most leathers lie in layers. But the fibres of Kangaroo are tightly interlaced. Interlacing is a fundamental principle of strength . . . the same mechanical principle that gives such strength to braided rope, to interlaced steel girders, to woven bamboo.

That is why no other leather is as good as Kangaroo for athletic footwear.

AUSTRALIAN



KANGAROO TANNED IN AMERICA



A complete sports
record book for

- FOOTBALL
- BASKETBALL
- BASEBALL
- SWIMMING
- TRACK
- TENNIS
- GOLF

**Here's
a book
every one
of your students will treasure**

● This profusely illustrated book—beautifully printed in two colors—will be treasured by every boy and girl in your school as the finest Mem Book ever produced.

It is a book every student will *enjoy reading*, because it contains interesting comments by some of the nation's most noted coaches on football, basketball, swimming, track, baseball, tennis and golf, and valuable pointers on training, conditioning and diet. And, above all, it is a book every student will want to *keep*, for it contains pages on which the student can maintain a *complete record* of games played in each sport and *autographs* of the school's leading athletes.

This Sports Mem Book will give your students—both boys and girls—many hours of real fun, and a valuable record book they will treasure for years. It will stimulate interest in sports in your school and inspire students to keep in condition.

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Please send me . . . copies of the Sports Mem Book for distribution among
my students.

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Address _____
City _____ State _____

Letters to the editor

Like Hearst? Never!

TO THE EDITOR OF SCHOLASTIC COACH:

Your September editorial, "Here Below," discusses the problem of American participation in the Olympic Games, in Germany next winter and summer.

Your analysis of the German situation in regard to their treatment of the Jews is correct, as are your remarks on the soiled condition of our own linen in regard to the Negro question.

But when you go on to say that a boycott of the Olympics in Germany would arouse bitterness between American Jews and American Germans you write like a Hearst.

Yes, racial strife is a terrible thing, a *very* terrible thing. But so is the economic and social order that fosters it. Only the overthrow of German fascism through the same means as it retains power will solve the national problem.

If not boycotted, the Games should certainly be transferred—but to either Italy or Japan! Never to those war-mongering nations! Imagine such outstanding Negro stars as Metcalfe, Owens, Peacock, et al., participating in Italian Olympic Games. Or Chinese who still love their own country going to Japan.

Very truly yours,

MARTIN DARVIN

Detroit, Mich.

Likened unto Hearst is the last thing SCHOLASTIC COACH wants to be. Mr. Darwin is wrong in supposing that the feeling between American Germans and American Jews would not be affected by our boycott of the Olympic Games. In Yorkville, New York City's throbbing German-American district, feeling against the Jew already runs high because of the proposed boycott. There has been violence, and signs placed on Jewish shops: "Don't Buy from Jews."—EDITOR.

We blush from cover to cover

TO THE EDITOR OF SCHOLASTIC COACH:

I am enclosing a form I clipped from the September SCHOLASTIC COACH, asking for advertising material which may be of help to me this year.

Quite a bit of the helps and tips these advertisers offer look as if they will be of value to me in coaching at Simpsonville High School.

I find in the September issue some very interesting and helpful articles on football, and I have found SCHOLASTIC COACH an invaluable little magazine from cover to cover.

Yours very truly,

J. SLOAN LEONARD

Simpsonville, S. C.

Mr. Leonard's bouquet is typical of the many thrown in our direction by coaches who find the advertising matter in SCHOLASTIC COACH almost as interesting as the editorial matter, if we may be permitted a pat on our own back.—EDITOR.

BULLETIN



COACH HANSON'S RULES FOR WARMING UP!

1. "Warm-up" before starting a game or any sort of athletic competition or strenuous exercise.
2. A "warm-up" raises the temperature of the muscles and thereby increases their efficiency.
3. On entering the gym or going on the field use three different types of movements in "warm-up." Allow about one minute to each.
 - A. Free, swinging movements (such as throwing the arms about in big circles, stationary running, kicking the knees up). These free, swinging movements start a greater blood supply flowing, thus bringing more Oxygen and nutriment to the muscles.
 - B. Stretching movements (such as raising on tip-toes and stretching out the arms far above the head). Stretching movements make the muscles more elastic.
 - C. Actual-game movements — Imitate some of the movements you will use in the game, such as passing, squatting and starting, kicking, etc.



EAT SHREDDED WHEAT FOR HEALTH AND ENERGY

One of a series of posters issued in the interest of good health by **SHREDDED WHEAT**

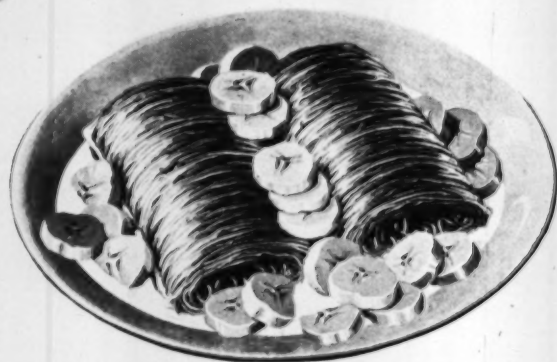
Coach—LET THIS QUICK ENERGY FOOD LEND A HAND!



You know better than anyone else that it takes countless things to build a team.

On the training table, for instance, hundreds of coaches have learned to rely on a daily breakfast of Shredded Wheat as an important part of the job. For each crisp, golden-brown biscuit supplies a perfect balance of the vital health elements. It's 100% whole wheat—and that means just the right amount of mineral salts, calcium carbohydrates, proteins, vitamins, phosphorus, iron and bran.

Recommend this delicious breakfast to your players. Shredded Wheat will lend a powerful helping hand.



SHREDDED WHEAT

A Product of NATIONAL BISCUIT COMPANY



ON THE OTHER SIDE OF THIS PAGE IS A POSTER FOR YOUR BULLETIN BOARD. IF YOU'D LIKE EXTRA COPIES FREE FOR GYM AND ASSEMBLY HALL BULLETIN BOARDS, SEND A POSTCARD TO NATIONAL BISCUIT COMPANY, EDUCATIONAL DEPT., 449 W. 14th ST., NEW YORK CITY.

HERE BELOW

Deception as an aid to educators in keeping athletes eligible

NOT the least of the problems confronting the school administrator and coach in connection with interscholastic athletics is the one concerning the eligibility of athletes. The rule that an athlete must be doing passing work in a certain number of subjects in order to be eligible to represent his school in interscholastic competition is quite generally applied, but not so generally observed. Sympathetic principals, teachers and judicious coaches who know their way around the weaknesses of key teachers, can, with the stroke of a pen, convert a star athlete from a classroom lummock into a student of good academic standing, and do so with the conviction that they have done athlete, school and community a noble service. Perhaps they have.

Unfortunately, the way it is commonly done breeds a kind of deception which is ordinarily not considered a fine trait of character. The dumb athlete who finds his report card studded with passing grades is not so dumb he does not know that these grades are the price his school is willing to pay for his athletic services. Yet many of these dumb athletes would be no brighter in their classroom work even though denied the privilege of playing on their school teams. Perhaps the playing field is the only place you can educate these fellows. As incomplete as such education is, it is possible that it is better education than they would get if they were required to look outside the school for the means of spending their athletic talents. The trouble with the athletic eligibility system in most schools is that it does not have the flexibility to allow for such individual treatment. Like all parts of our educational machine, this one is geared to handle the so-called normal student.

In a school, for example, that is a member of a league or state association requiring athletes to pass a certain amount of classroom work, the trained educator who would give such individual treatment to a dumb athlete whom he wishes to save from further degeneration, has recourse only to deception. He arranges to have all teachers give passing marks to the athlete, so that the requirements of the league are fulfilled—on paper.

Of course, the leagues and state associations are forced to set these inflexible rules in lieu of a sufficient number of honest and

qualified educators in control of the various member schools. It is well known to what extent some so-called educators will go to win a ball game.

All this is by way of prefacing our remarks on the movement in certain quarters, among them the Suffolk Public Schools A. A. on Long Island, to abandon the rule requiring athletes to be doing passing work in the classroom.

"If athletics is a regular part of an educational program," said Percy M. Proctor, former principal of Patchogue High School, "why deny any competitor the right to that part of his education simply because he is not doing well in something else? A boy isn't barred from studying Latin because he is doing poorly in history."

This is a relatively new slant on the matter of the classroom eligibility of athletes, and one that should provide the basis for much thought on the part of school officials whose

star athlete who cannot do passing work in the classroom can find an outlet for his athletic energies in the intramural program. This is about as stupid an educational procedure as sending a bright student to the class for mentally retarded students. There are a few schools where the whole athletic program is intramural, and no interscholastic games are played. In these schools the star athlete problem is relatively simple: the faculty is guided by the needs of the athlete in question, and makes whatever moves are best suited to his all-round development, and one of these would not be kicking him off his team.

If only the star athlete problem could be met so simply and straightforwardly among schools competing in interscholastic leagues! But school officials and coaches have not yet reached this degree of cultivation in their relationship to one another.

But we hold to the belief that they are getting there. But when we look at the nature of the offenses against league rules committed by schools, and protested by their rivals, we wonder.

Dr. Dawson's Daring (Spelling)

LAST month we had occasion to become enthusiastic over a new book (*Curriculum in Sports [Physical Education]*) by Seward C. Staley and to express our support for Dr. Staley's substitution of the term *sports education* for the commonly used *physical education*. Hardly had we returned to the routine affairs of life before the postman placed on our desk a book which was destined to send us to hitherto unscaled heights of joy and admiration for work done in the service of education. The book is *The Physiology of Physical Education* by Percy M. Dawson. It is not our intention to review it here, for that task is in the competent hands of Dr. Karpovich on page 35, but we do want to have you sample a little more of the text for the purpose of letting your eyes feast on Dr. Dawson's *Daring Spelling*, and your mind on the rich quality of the doctor's writing. Hence, we feel that the space we give here to a reproduction of a page from the book is well utilized. The price of the book, unfortunately, is \$8, but it is the kind of work you will never regard in terms of money.

892

THE PHYSIOLOGY OF PHYSICAL EDUCATION

Recreation

Recreativ sports. The enormous power of production achieved by mankind during the last 50 yrs. is already thrusting upon the western world a degree of leisure for which it is ill-prepared. It is ill-prepared because of its antiquated economic system which keeps so many of our leisure class in the bred line, & it is ill-prepared because of its inadequate educational system which offers so little assistance in choosing elevating occupations for our leisure time. It is only the latter of these aspects which concerns us at present: purposive cultivation of those powers & tastes upon which we must rely for the enjoyment of leisure. Doubtless our educational system will be extended more & more to meet this need. But tho we may cultivate art & music & literature to the utmost, we shall never have a complete & satisfactory program until we have cultivated the skill & taste for physical ex. & sports. The English gentleman with his tennis & his cricket is perhaps temporarily submerged in labor troubles. But the goal of society is that all shall be eventually English gentleman. The "American Gentleman" may at the present time indulge in a few sports, but his choice is limited & the habit of sport is not sufficiently general.

Insofar as F.E.D. cultivates the power & inclination to participate in sports not only during youth but thruout life, it is adding to the joy of life & fulfilling a very important rôle.

Let us look forward to the time when sport will play a much more important rôle in the lives of our men of middle age, when their wives will have abundance of folk dancing & active recreational games, when the writing of a page of poetry & the playing of a game of tennis will be interchangeable terms, & when neither the poetry nor the tennis of the av. person will be so excruciatingly awful.

If education is to meet the demands of high power production, it must teach mankind not only how to work but also how to play.

Let us note also that sport has an element to contribute to hygiene. For mere information is not likely to restrain youth from squandering its health in costly dissipation. To information must be added intelligent self-discipline. To be sure, there is nothing so repellent to the occidental, especially the youthful occidental, as the word discipline, whether it be self-discipline or discipline imposed from without. And yet our young people are capable of great personal sacrifice when confronted by a demand for discipline in the accomplishment of an end which is obvious, immediate & which has met with their approval. Too often discipline, irksome as it is in itself, since it implies the domination of the newer parts of the nervous system over the older & better established, has been made doubly difficult by the failure to interpret it adequately to the young in terms that can be understood & appreciated.

Reproduced specimen page from "The Physiology of Physical Education" by Percy M. Dawson (The Williams & Wilkins Co.)

regard for sports has led them to the conviction that the playfield is the equal of the classroom as a training ground.

For our part, we are so one-sided in the matter that we are all in favor of requiring students to be good athletes before allowing them to enter the classroom!

Let him eat cake

We have heard the argument that the

We cover the high schools

We commend to your attention the new teachers' publication, *Highschool*, which Scholastic Corporation, has added to its family. There is now *Scholastic*, the American High School Weekly for students; *Scholastic Coach*, without which no modern school sports department can function properly; and *Highschool*, which appears twice a month bearing tidings of what is going on in the world of secondary education, classroom-angled for the teacher.



WILSON OFFICIAL

"Chuck" Taylor BASKETBALL

BECAUSE . . .

- **IT'S PRE-TESTED**—This is the official Chuck Taylor basketball, which means that it has been given the severest tests in Chuck Taylor's Clinic, and has won complete approval.
- **PERFECT BALANCE**—Its evenness of contour provides perfect balance; insures truer bounce and more accurate throw.
- **NO DISTORTION**—Made of carefully selected, first quality cowhide, it is double lined by the counter stress method; therefore its shape will never become distorted.

● **LEAK-PROOF**—The molded one-piece bladder is DOUBLE tested against leakage.

● **IT'S LACELESS**—and represents the very latest type of design and construction.

For a great game, be sure to play the Wilson Chuck Taylor ball. Every member of your team will back up your good judgment. ● Wilson basketballs were the first to give the Wilson organization recognition as makers of superior sports equipment. From that day to this, Wilson basketballs have set the pace which the rest of the industry has followed.

CHUCK TAYLOR has worked with leading coaches throughout the country, and his value to basketball is well known. Players and coaches everywhere are eagerly adopting this ball which bears his signature and endorsement.

Chuck Taylor is a member of the Wilson Advisory Board

Wilson

SPORTS EQUIPMENT

WILSON SPORTING GOODS COMPANY, Chicago, New York and Other Principal Cities

COACHING SCHOOL REVIEW

WARNER MADIGAN SPEARS CRISLER WOLF BIERMAN BIBLE
LITTLE KAHLER KERR DAWSON SWAN LINDSEY CASE BARRY WELLS

Glenn S. "Pop" Warner

Head Coach, Temple University

Pop Warner taught this year at the Texas Tech Coaching School, Lubbock, Texas, where all coaching school attendance records were broken with an enrollment of 482 coaches from 32 states. The school had as instructors in football, besides Warner: Slip Madigan of St. Mary's, substituting for Frank Thomas of Alabama, who could not attend because of illness; D. X. Bible of Nebraska; Fritz Crisler of Princeton; Bear Wolf of Texas Christian U.; Bernie Bierman of Minnesota; Art Kahler of Brown; Blair Cherry of Amarillo High; in basketball, Francis Schmidt of Ohio State; and Chuck Taylor of Converse Rubber; in track and field, Bernie Moore of Louisiana State, assisted by Jack Torrance and Glen Hardin; in general physical education and organization G. L. Hermance of Rice Institute and Mervin Perry of Hot Springs H. S. The following report on courses given by some of the above instructors has been prepared by Ed McKeever of Texas Tech.

THE 2-wingback formation is an outgrowth of the 1-wingback. The principal disadvantage of the wingback formation is that the ball must be handled more often before it can be carried by the wingbacks. This puts an additional premium on timing in the backfield and efficiency in the play of the line.

The key man in the Warner backfield is the fullback. He must be a powerful, hard-driving back who can go into the line on bucks and who is versatile enough to perform all the other duties expected of an all-round back. He handles the ball in the majority of cases, either feeding it to the wingbacks on reverses or carrying it himself.

The quarterback is second only to the fullback in his importance to the proper carrying-out of the plays he orders. He will also handle direct passes from the center, will spin, fake, pass, carry the ball himself.

The left halfback should be the best open field runner as it seems the best plays go to the right. An ideal right halfback would be one who is left handed and footed.

The straight-ahead runner is the most consistent ground gainer, as the shifty player is inclined to give up when he is hit. Teach your backfield men when starting about three and one-half yards behind the line to go to the place where they are supposed to go and not to slow up and try to pick a hole, as they will lose much of their drive in doing so.

In hitting the line the back should naturally drive low, head up, looking where he is going. Teach your fullback to drive in with his feet pretty far apart and with short steps. Men who are in front leading interference should go in with the same kind of charge.

Have only one set of plays and don't have different sets for right and left formation unless you cannot work the short side as well as the long side. Have about three good sound plays at the line. A straight play, a slicing play, and then a smashing play should be enough. Stress a tight line as your backs cannot play behind a loose line. The fullback plays about three to three and one-half yards back. He should stay in the same position on all plays.

Warner uses an unbalanced line for two reasons: (1) it affords better blocking angles for the linemen; (2) he believes that his best interference is the middle man in the line, and because this is not the center, it allows this man to pull out either way with equal effectiveness, since he is as close to one end of the line as he is to the other.

The five plays to the right Pop Warner diagrammed especially for this report. He gave these particular plays in order to show the variety and deception that can be worked in with the fullback always faking the ball to the quarterback. Double and triple this deception when the quarterback receives the ball from the fullback. In the first play (from the top) the fullback, after faking to the quarterback, gives the ball to the left wingback who goes between the defensive guard and tackle; the second play shows the same wingback going off tackle. In the third play the fullback himself goes through the strongside, between guard and tackle. In the fourth play he starts as though he were going to do the same thing, and backward-passes to the right wingback. In the fifth play he plunges through center, after faking.

Warner uses a line shift with the center on the ball, and nine others in a line a yard back, hands on knees; and the fullback a yard further back. On the shift, the line goes to either right or left formation, and the backs usually into the close double wing shown in the diagrams, although they may go into the single wing, punt or Warner C formation which has the end out and the wingback in the hole.

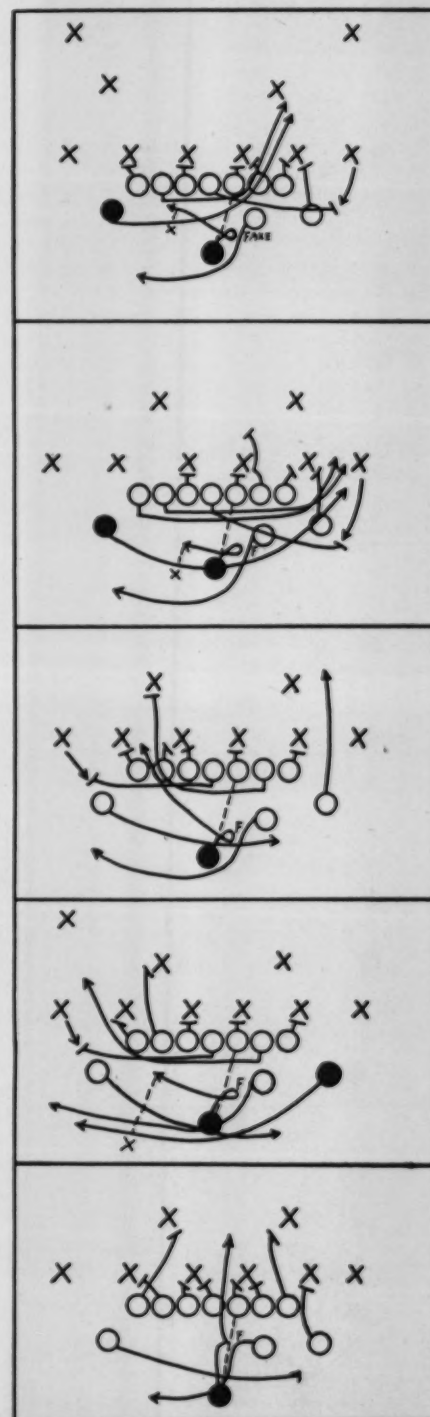
The regular close Warner double wing carries great strength inside and outside the tackles, and with good lateral passes gives strength on wide plays. The reverses, fake reverses and double reverses keep the defensive teams worried because they all start out alike and have merits of their own. Combined with the fullback's drives this gives a very diversified attack.

Defense. "We use the 7-diamond and the 6-2-2-1 defensive formations more than anything else," Warner said, "and we like to mix 'em up." "Against line plays the 7-man line is the best, and we like to have our backs play as close to the line on their side as the offensive backs play on the other side. Against forward passes we use

Diagrams by Warner

"These are a few variations of the 2-wingback formation plays, based on the fullback faking the ball to the quarterback with the quarterback on the short side of the line."

-Pop Warner



the 6-2-2-1. Some coaches say that the best defense against the wingback formation is the 6-3-2. Against a team which plays a strong formation on one side it is of course necessary for you to play a strong defense against that side, as two-thirds of the plays are run to the strong side on this type of formation. On a shift formation teach your defense to shift over far enough. The main trouble against a shift is that the linemen do not shift over far enough. It is much better to overshift than to undershift. Have your linemen take a high stance on the shift; so that they can see where the play is going."

Art Kahler

Assistant to Tuss McLaughry, Brown Univ.

BBROWN University isn't the first team to have used the triple wingback, but it is the first team to make much of it, and thus to attract the attention of the public through the press.

Brown doesn't always go into the triple wingback. From the huddle, the backs move into preliminary formation with the two halfbacks on a line a few yards in front of the quarterback and fullback. From this preliminary formation, the shift into a triple wingback, double wingback, single wingback or punt formation is a simple matter.

To get into huddle: The center takes a step and a skip back from the ball. Then all linemen and backs line up in a huddle. As the signal is given all linemen and backs

go to their respective positions with the count of three, linemen all turning inside.

Kahler stated the value of the triple wingback in the following seven points: (1) fine passing attack; (2) power on end sweeps; (3) power on off-tackle runs; (4) power on reverses; (5) power on fake reverses; (6) power on spinners; (7) power on double reverses and fake double reverses.

As in the double wingback formation, the key man is the No. 3 back (the fullback). He must be a first class ball-handler, passer, powerful line plunger and a good kicker.

E. P. "Slip" Madigan

Head Coach, St. Mary's College

Excerpts from Madigan's remarks on the individual play of each lineman on offense:

Center. The feet should be well spread, with a stance which will give a wide base and a comfortable position. The ball should be laid straight on the ground with the hands on the seam. The wrist should be well bent, with the right hand to pass and the left hand to guide the ball. The center should always follow through with his pass. When the ball leaves the center's hands he should never follow it with his eyes. He has other things to do. But the main duty of the center is to pass accurately and therefore he cannot be depended upon too strongly to carry out difficult blocking assignments.

Guards. The best type of guard is the short, stockily built player. This type of guard is at a great advantage as a blocker. Because it is the guard's duty to pull out and lead interference on seven out of every ten plays, the best stance is with one foot back, a cross between a charge and a sprint stance. If he is a right guard his right foot should be back and the weight should be on the front foot. We use the step-back method of pulling out. [Photographs of Hunk Anderson demonstrating, this appeared on the cover of last month's Scholastic Coach.—Editor]. On pulling out the guard should throw his head and shoulders in the direction in which he is going. The stance of the left guard is just the opposite from that of the right guard.

Tackles. If the defensive guard is a waiter the tackle should go straight at him. If he is a rusher the tackle should block him the way he goes. If he is a drifter the tackle should use a high body block.

Ends. Tricks that will enable the end to get into the open: Fake block. Go fast, float, then fast again. Cut in and then out, sharp. Do not change stance for a pass play; use same stance for everything. But mix up your stunts.

Tips on forward-passing tactics. Every forward pass should resemble a running play. The timing of the decoy men will get the player to whom the pass is going into the open. The passer must be protected for your passing game to go. If you throw any wide passes—to either of the flats—the backs will have to do the protecting. During practise, in order to give the passer some footwork, have two men rush him.

Points that help make a team successful.

Superiority of charge and interference. Fast starting and getting to the point of attack. Proper timing. Every assignment filled. Tips: When you get a defeat put your men to blocking and tackling. Timing can be helped by counting. Encourage the men to count to themselves on every play. Signal practise after ten minutes is wasted because men lose interest. To perfect plays: Signal practise; draw the plays on the blackboard; dummy scrimmage; call plays and have the men write them out.

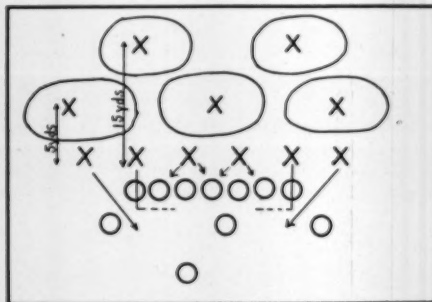
Pictures on opposite page

The pictures on the opposite page were taken last fall during the St. Mary's-Fordham game in New York, which St. Mary's won, 14 to 9. It was an all-Notre Dame contest, for both Jim Crowley, Fordham coach, and Madigan are Notre Dame men. The top play, which resulted in a 12-yard gain which paved the way for St. Mary's second touchdown, occurred in the fourth quarter. At that time Erdelatz was playing left guard for St. Mary's, having started the game at right end, in which position he is seen in the play to the left side, which occurred in the first quarter and gained only one yard. Note how Madigan shifted positions of his linemen. Meister was at left tackle in the fourth quarter, having been moved from left guard. Jorgensen was at center in place of Elduayan who was shifted to right guard. Maxham, right end in the fourth quarter, had been playing right tackle. The backfield was unchanged, with Fiese, Schreiber, Nichelini and Kellogg. The play to the left side failed because Sorota, Fordham fullback, was not properly disposed of. Sabo should have been taken on a one-two block by Pennino, St. Mary's left end, hitting him low and Fiese finishing him up. Pennino missed, and Sabo was in full command of himself (as the picture shows) when Fiese came to him. Pennino shows in the picture half hidden by Schreiber. Evidently, Sabo saw what was up, and avoided Pennino's low block by a sidestep. He played his hands on Fiese, and as the ball-carrier (Nichelini) was attempting to cut inside, Sorota had him, Meister having been intent on Sabo or Miskinis or both.

H. O. "Fritz" Crisler

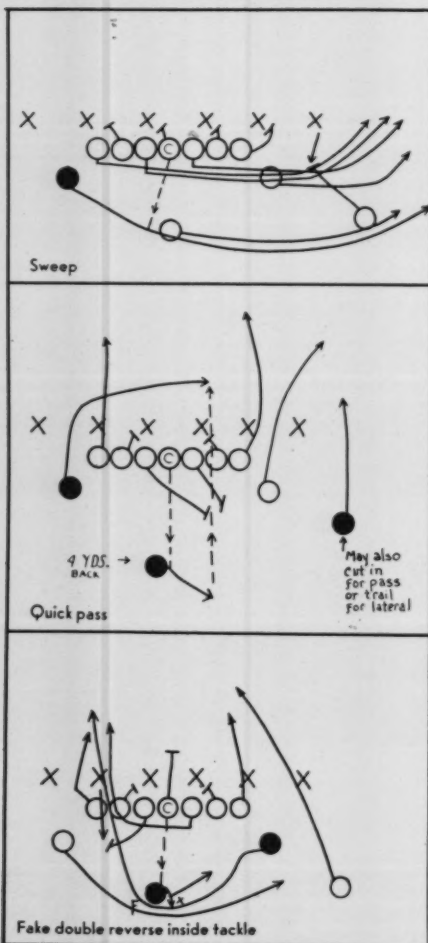
Head Coach, Princeton Univ.

The Princeton defense against the double wingback:

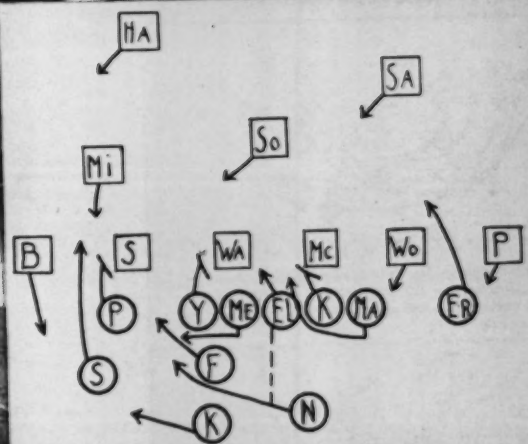
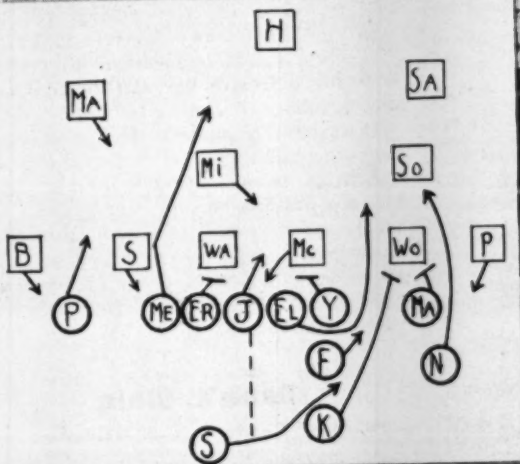
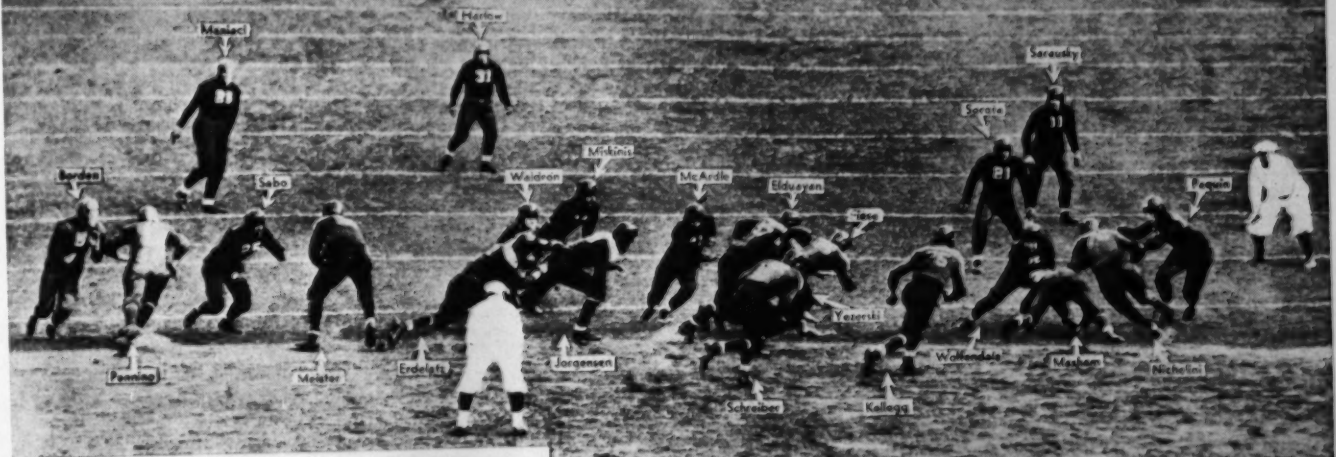


The ends smash in hard and fast to the point indicated in the diagram and if the play comes their way try to smash it. If it goes to the opposite side or develops into a spinner coming back into the line the end [Turn to page 10]

Brown's 3-wingback

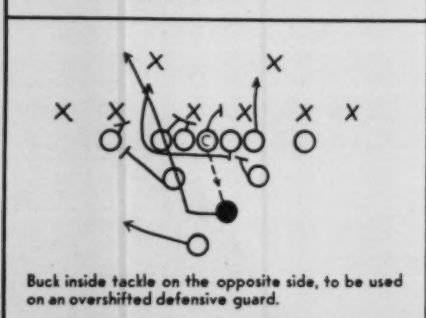
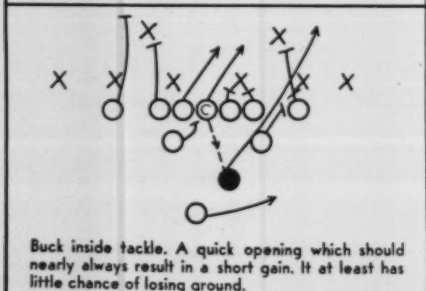
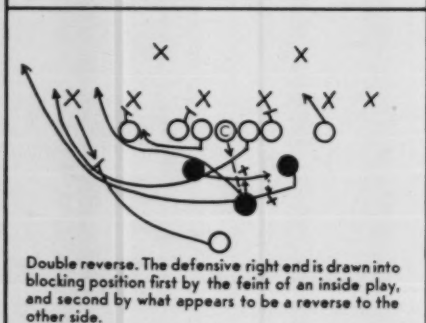
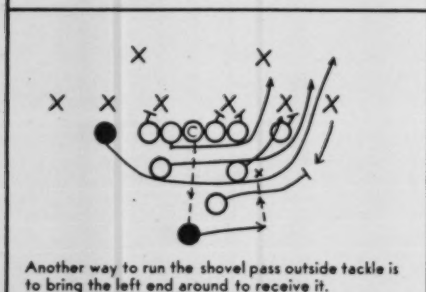
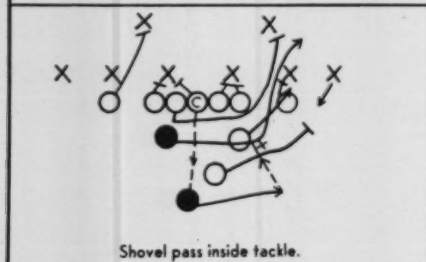
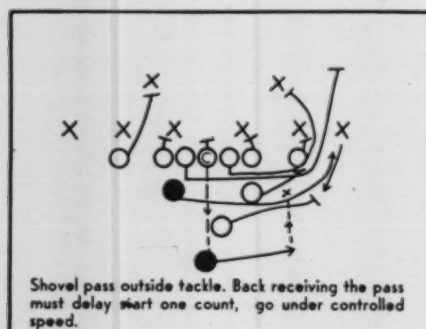


THE DIAGRAM COMES TO LIFE



"Slip" Madigan is the playwright; his 1934 St. Mary's team the players, in their game with Fordham in New York

Crisler's shovels, etc.



must attempt to cut it off. On passes, both ends rush the passer.

The tackles step across the line of scrimmage with the ends under their control. If both the end and wingback in front of him pull out behind their own line of scrimmage, the tackle follows them, cuts in closely behind the line of scrimmage to cut off a spinner through the line or reverses. Coach Crisler stressed the point here that a fast tackle could cut off many plays before they got started. If both the end and wingback go down the field, the play is probably a pass or a running play to the opposite side. In this event, the tackle could either hold up the end or rush the passer according to previous defensive planning.

The guards play squarely in front of the third man from each end, and play low and drive through. Inasmuch as the double wingback system calls for the outside tackle and the men on both sides of the center pulling out in interference, the guards will find that the men on both sides of the men that they're playing in front of will be pulling out, so the guards will have excellent chances of getting through and breaking up plays behind the line of scrimmage.

The center plays in front of the blocking back, watching him closely all the time. Coach Crisler pointed out that this man would show the play in most cases, and if the center would follow him he would be at the spearhead of the running plays, and would be safe on passes as this back is retained most of the time on passes. The center covers him man-for-man on passes if he does go down, and when he doesn't he covers the center zone.

The outside-line backs take their cues from the end and wingback in front of him with the following simple rules to remember:

1. If both the end and wingback go behind their own line of scrimmage, the play cannot come back to your side so drop back and become a safety.
2. If both of them block the tackle, come up fast and be an auxiliary end because the play is probably coming your way.
3. If only the wingback leaves behind his line of scrimmage, it is probably a reverse pass or a spinner back through the line and so move up.
4. If both of them come down the field, look for a pass and take the first man that goes to the outside.

The two deep backs also take their cues from the ends and wingbacks. Give them these simple rules:

1. If both the end and wing block, move up and become a halfback taking the place of outside linebacker on his side who has moved up to end on this situation as described above.
2. If both go behind their own line, drop back and become a safety.
3. If they come down the field, drop back and prepare to take the first man that cuts to the inside.
4. If the wing goes back and the end comes down the field, look for a reverse pass.
5. If one crosses to the other side, look for crossing ends. In that case the two deep backs exchange men.
6. Be alert for quick kicks and play deeper in a kicking situation. Of course when opponents go into a regular punt formation, all backs will take their regular punt-receiving formation (6-2-2-1).

Bear Wolf

Line Coach, Texas Christian Univ.

Coach Wolf gave the following tips on individual defensive play:

Defensive stance. (1) Comfort. (2) Relaxed. (3) Mobile. (4) Three-point position preferable. (5) No set rule concerning which leg forward or back playing an opponent. (6) Crouch position is all right for big men and also on first downs or big yardage. (7) When short yardage is to be gained the defensive line plays lower.

Various defensive stunts

Regardless of any stunt the most important thing is that every lineman play and take care of his own position: (a) primary charge in own territory; (b) secondary charge in the direction of the ball; (c) follow the ball at all times. Guards—(1) stay low; (2) foot feint; (3) shoulder drive; (4) Submarine; (5) over the top; (6) arm lift; (7) hip drive. Tackles—(1)

foot feint; (2) knee drive; (3) arm lift; (4) hip drive; (5) pivot; (6) shoulder drive. **Defensive tackle against wingback—**(1) always play one man; (2) feint end-play wingback; (3) feint wingback—play end; (4) hard drive into wingback; (5) play end with hands, and hip wingback; (6) pivot only when pinned; (7) protect your legs at all times and keep in mind the down, distance, and position.

Defensive tackle vs. the end. (1) Never neglect the end—always play him or know where he is at all times; (2) the offensive end is a big help to the alert defensive tackle in determining the type of play to come; (3) foot feint; (4) shoulder drive; (5) hip drive; (6) arm lift.

Defensive tackle vs. inside wingback. Same stunts as against regular wingback; only reversed.

Center defensive play. (1) Stunts when using a 7-man line or center in the line are the same as guard uses, and depend on the down, distance and position on the field; (2) center cannot be as quick or as aggressive as guards; must be free from being caught in line in order to be able to swing out if necessary; (3) key man on defense; (4) quick and alert to diagnose plays of opponents; (5) responsible for defensive line shifting and correct spacing.

It is very important that all linemen keep in constant contact with each other—a talking defense. Each man must play his own position and not worry about the other players—let them do their own worrying. Always be ready and alert on the defense. Outcharge your opponent. A good rule on defense is: If you can't stop them, join 'em.

Dana X. Bible

Head Coach, Univ. of Nebraska

EXCERPTS from Coach Bible's observations on kicking and passing, and defense against them:

Punting. Practice punting under game conditions. That is, have defensive players attempt to block the punt and have normal protection set up for the punter. The kicker should take less than two seconds to get the ball off. He should take a short step with the kicking foot and bring the other foot well forward to make for a good balance as the kicking foot is thrust forward on the kick. The kicker should have his arms extended as he steps, and not thrust them out suddenly at the last moment. The kicker should step in the direction he wants the ball to go.

Protecting the kicker. Let the defense commit themselves, and then block. When they add a man to the line, one less goes down under the punt they should widen their stride when they get within 8 to 10 yards of the punt-receiver. Reason: to be in better balance to move at any angle with the punt-receiver.

Receiving kick. All high kicks that are short either let them strike the ground, or signal for a fair catch. Play all low kicks. Go straight forward after catching the ball, then look for your cut. Receiving team should block [Continued on page 22]

AGAINST ALL DEFENSES

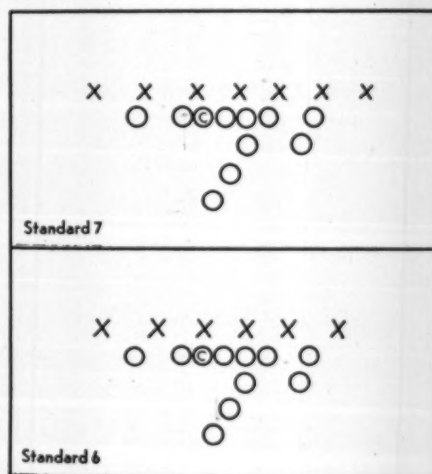
By B. W. Bierman

The noted Minnesota coach shows adjustments in blocking to meet variations in the defense

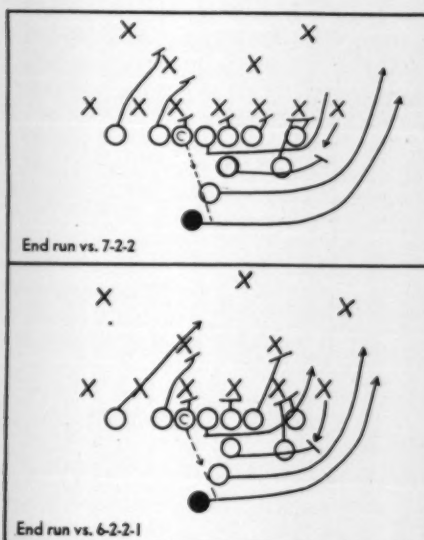
ONE of the most important problems of tactics confronting the coach has to do with working out changes in blocking assignments to meet variations in the formation of the defense. If defenses could be depended upon to stay in 6-man or 7-man lines, and stick to their customary spacing, this problem would be a relatively simple one. But as it is nowadays a defense may change its formation while your linemen are stepping into their places, and your team must be prepared to handle the new situation as an ordinary piece of business.

As it is impractical to have different sets of plays for different defenses, the coach must adapt his regular repertory of plays so that they will be sound against whatever defense might come up. A few minor adjustments are usually all that is necessary for meeting the various defenses, and it is the purpose of this article to give these adjustments for the types of defense that might reasonably be expected this season.

The two so-called standard defenses are as follows, shown against loose ends:



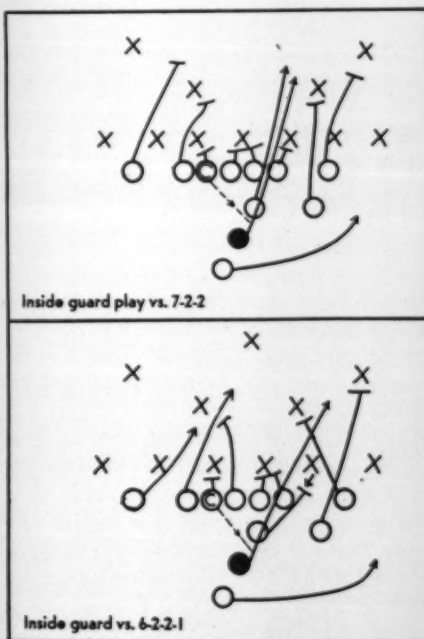
Regardless of which of these formations you expect to meet more frequently, I believe it is well to learn first the play assignments against the 7-man line; then, after your team has mastered these, to make the necessary adjustments for the 6-man line. This order is preferred because it places the harder job first. After passing around a medicine ball a basketball seems extraordinarily light. When a team has been practicing against a 7-man line and has learned its job, the shift to practicing against a 6-man



line is much more easily negotiated than if it were done the other way.

You will notice in these standard defenses that the spacing on the weak side is nearly the same in both cases. If the outside guard (or the third defensive man on the strong side, counting from the end of the line) is removed, and the man next to him on the inside moves out a little, and the man next to him moves in a little, we then have a standard 6-man line. And that position is the real key to the whole situation. Of course, the exact man removed from the line may be any individual. Usually, he is the center.

Take the end run vs. the 7-2-2 and vs. the 6-2-2-1. You will note that the

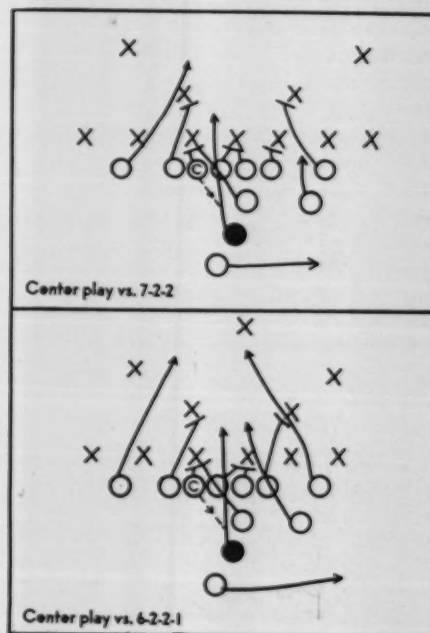


only difference is that in moving against the 7-man line the tackle blocks the guard on the line, while against the 6-man line he goes through for a secondary defensive man; and a few of the blockers find their same men in slightly different positions, which demands of these blockers dexterity in getting the desirable angles before making contact.

On the off-tackle play there would be no changes other than those in effect on the end run. On the inside tackle play, again recall the key to the situation, mentioned previously—that when the opponents change from a 7 to a 6 they are merely removing from the line of scrimmage what is in effect their outside guard.

Against the 6-3-2 the inside tackle play is really the same as it is against the 6-2-2-1.

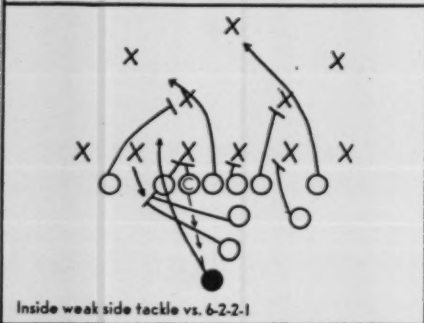
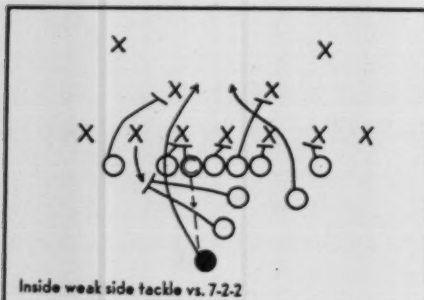
Against the 7-man line the extra hole, according to our key, is inside the guard on the strong side. If this



play is called and the defense unexpectedly goes into a 6-2-2-1, we would play it as shown in diagram to the left, bottom of the column.

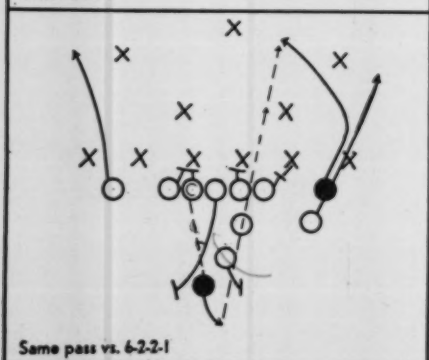
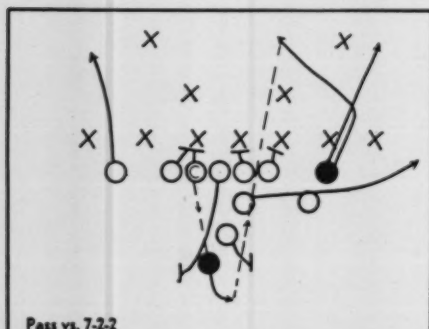
In the center plays and the inside weak side tackle plays the only changes are slight ones, and they are on the opposite side from which the play goes. On all wide direct plays to the weak side they can be played in an identical manner against both 7-man and 6-man lines.

The only appreciable change in the blocking assignments for forward pass



plays is in the play of the strong side tackle. Against the 6-man line he is called upon to block a little wider.

In all deceptive plays of any type the changes necessary for a play hitting any one particular hole could be exactly the same as they would be for a straight power play. Of course, I am not giving these blocking assignments as they need necessarily be made for each type of play. Blocking assignments are being mixed up today more than ever as part of the offensive deception. My purpose here is to indicate how you can make changes so that defensive deception does not catch your boys unprepared. After all, most high school coaches cannot afford to do much in the way of mixing up the blocking assignments for the



purpose of surprise, because it is usually a full task in itself to get the young team running smoothly according to one set of assignments for each play, with these suggested adjustments as the defense changes. Nevertheless, where a high school coach can do it, there is much in deception to be gained by varying the blocking assignments on the same play run again and again in its proper sequence throughout the game.

The changes that would be necessary for a series of plays run from the double wing back formation, or from any other orthodox formation, would be almost identical with the changes I have diagrammed as applying to the single wing back formation.

There are a number of other defensive line formations that may be met, some more often than others.

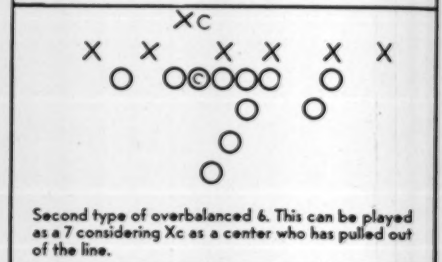
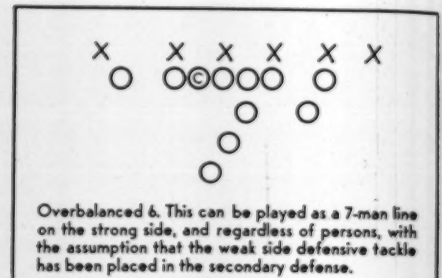
There is the overbalanced 6-man line. This can be played as a 7-man line on the strong side, and regardless of persons, with the assumption that the weak side defensive tackle has been placed in the secondary defense. A second type of overbalanced 6-man line, with a gap between tackle and guard on the weak side, can be played as a 7-man line, considering the backer-up in the hole as the missing man.

In the overbalanced 7-man line the end on the strong side can be played as a back who played wide and came up fast, and the other six men can be played exactly as a standard 6-man line.

The plugged line diagrammed is a standard 6-man line with a man plugged in between the defensive guard and the tackle on the strong side. It is almost impossible to gain ground at this well-policed spot, so it is up to the quarterback to call plays that hit holes somewhat removed from it. If the quarterback uses his head this type of defensive line is weak.

Some years ago all defensive lines were standardized sevens. Then the six came in, and sometimes the five pops up. And there are several varieties of each, some of which I have shown. And when we least expect it an eight or a nine shows up.

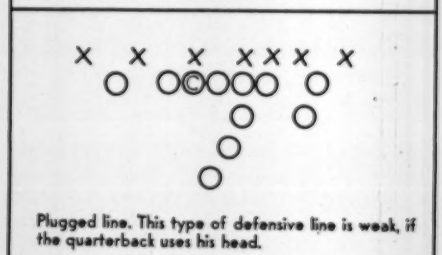
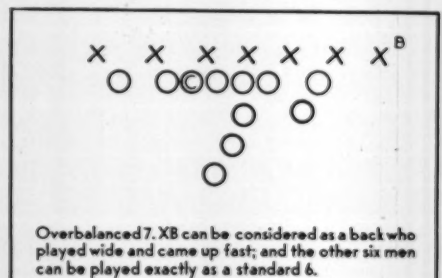
It is out of the question to teach a group of high school, or even college, players how to run a good sequence of plays against every conceivable type of defense, and it is even more out of the question to expect high school boys to take on such an assignment. But it is not at all out of the question to teach them to meet a standard 7- or 6-man line, or either of these formations overbalanced. Now if eight or nine men are used on the line you have your forward passing attack to take care of that situation. And if they gang up in one spot it means that they



have left some other spot weak. So you should make your quarterback, and all your players, familiar with these peculiarities, and also familiar with the treatment for them so that the instant they see the defense gang-ing up in one spot they know as well as you do that there is a barn door open someplace, and it is not far away.

A versatile attack is good insurance against unorthodox defenses. When the defense knows you can run to all points, pass forward, backward and laterally, they will not throw too much of their strength toward stopping one of these weapons, for in doing so they weaken themselves against the others.

The offense still has the advantage over the defense in football, which is as it should be. It is the problems of the offense that make the game so fascinating for coaches and players, and as long as the ball can be run, thrown and kicked with at least as much liberty as it can be done today, there will be plenty of planning and thinking to occupy the attention of the coach and his players.



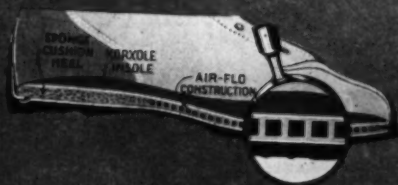
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SURVEY OF ARIZONA HIGH SCHOOL COACHES

By Mark MacIntosh

Data show their earnings, education, experience, professional training, civic and other interests

Mr. MacIntosh is director of physical education and head coach of the Arizona State Teachers College at Flagstaff. This is the first of two articles he has written for *Scholastic Coach* on his study of Arizona high school coaches—their working conditions, experience, earnings, education, professional training, and recreational and civic interests.

A COMPOSITE picture of Arizona high school coaches shows a man receiving less than \$2,000 annual salary, putting in more than fifty hours per week on the job, and, in whatever time he can find outside the demands of his home, working on side-lines that bring in anywhere from \$15 to \$300 per year.

These are some of the facts revealed in a study the writer made of Arizona high school men coaches for the purpose of aiding Arizona teacher-training institutions in the educational and vocational guidance of young men contemplating careers in the high school sports education field.

The questionnaire method was used to collect the data in this study. There are 60 public high schools in Arizona. Check list questionnaires were sent to 72 men whose names appeared in the *Arizona Educational Directory* for 1934-35 as teachers of physical education or athletics (coaches) in the 60 high schools of the state. Of these 60 schools 51, or 85 percent, have one-man departments of physical education and athletics, the other nine schools having two- or three-man departments. Seven schools are six-year high schools, two are three-year high schools, while the remaining 51 (85 percent) are four-year high schools.

More than 90 percent of the questionnaires were filled out and returned. This high percentage of returns, and the completeness of the answers, indicate that the questions were pertinent and that the respondents were interested in the study. Since nothing was to be gained by deception, there is every reason to believe that the information procured is reliable. Fifty-three schools are represented in the returns of this study, or slightly less than 90 percent of all the public high schools in the state of Arizona.

Working Conditions, Experience, and Earnings

An accurate picture of the conditions under which the respondents in this study work is shown in Table I. For a measure of central tendency in

enrollments for Arizona high schools the median figure of 65 boys gives a much more accurate measure of the sizes of these schools than the average figure of 145.5 because of the fact that one of the schools (Phoenix Union High School) has 2200 boys, approximately 1,430 more than the next largest high school in the state. The middle 50 percent of the high schools have between 35 and 131 boys enrolled. That enrollment of girls in Arizona high schools practically parallels that of boys is shown by the data from 49 schools with a total of 7,131 boys and 7,084 girls.

The coaches' working day is a long one. On the average they arrive at school at 8:06 o'clock in the morning and do not get away until 5:26 in the afternoon. After their evening meal they have to go back to the school building on the average of about two evenings per week in the fall, three evenings per week in the winter, and two per week in the spring in their regular line of duties. During the school day (8:06 a.m.-5:26 p.m.) these men spend on the average more than 44 hours per week teaching, coaching, and supervising academic and athletic programs throughout the school year, and they also spend 7.6 hours per week on "home work." The average coach started in his first physical education position at the age of 23, has had approximately seven years experience in the field, and has held only two different positions. Thirty-one of the respondents report that their present jobs are their first ones in the sports education field.

The 1933-34 average salary of \$1612 for the coaches compares favorably with the \$1663 average for all high school teachers in the state, as does the median salaries of \$1525 and \$1595 for the respective groups (Table I).

To see what happened to salaries during the past number of years graphs of average salaries were constructed

ed as follows (see Fig. A): A—nine men who gave full data on their salaries for the past nine years; B—five men's salaries for the past seven years; and C—four men's salaries for the past six years. No graph was constructed for the eight-year period because there was but one respondent who reported for that period. In all three graphs the peak salaries occurred during the school year 1929-30, and the following year salaries began a decided drop. While there is a one year "lag" shown on the graphs,

TABLE I

ANALYSIS OF THE WORKING CONDITIONS, EXPERIENCE, AND SALARIES OF ARIZONA HIGH SCHOOL COACHES

| | Average | Q ₁ | Median | Q ₃ | Range |
|---|---------|----------------|--------|----------------|----------|
| Male enrollments in schools studied | 145.5 | 35 | 65 | 131 | 10-2200 |
| The coaches' working day: Time of arrival at school (a.m.) | 8:06½ | 8:15 | 8:00 | 8:30 | 7:30-9 |
| Leave for home (p.m.) .. | 5:26 | 4:30 | 6:00 | 6:30 | 3-7:00 |
| Teaching and coaching loads (hours per week) | 44.6 | 31 | 38 | 47 | 11-80 |
| No. of evenings per week spent at school in line of duty—Fall | 2.1 | | | | 0-6 |
| Winter | 3.2 | | | | 1-6 |
| Spring | 1.9 | | | | 0-5 |
| No. of hours per week spent on "home work" .. | 7.6 | | | | 0-20 |
| Age of first position in physical education | 23.1 | | | | 19-30 |
| No. of different positions in this field.... | 1.9 | | | | 1-7 |
| No. of years experience in this field | 6.8 | | | | 1-26 |
| Salaries for 1933-34: Arizona high school coaches | \$1612 | 1350 | 1525 | 1800 | 810-2395 |
| *All Arizona high school teachers | 1663 | | 1595 | | 450-2627 |

*12th Biennial Report, State Superintendent of Public Instruction, 1932-34.

it is quite safe to say that the drop in salaries was caused by the economic crash in the fall of 1929. To ascertain what might have been the trend in salaries for these same years had not the crash occurred, average annual salary increments were computed from the *Arizona Educational Directory* of 1930-31 of all the high schools which gave this type of data (15 schools). The figures in this 1930-31 directory, issued in the fall of 1930, were collected during and before the school year 1929-30 and therefore should not be data that would show the effects of the depression. The average annual salary increment for the pre-depression years was thus found to be \$77.66 for all Arizona high school teachers, and it was also found that normally this annual increase in salary would have been received by the teachers during their first eight years of experience. The dotted lines in Fig. A are simply graphs of the normal average annual rise of \$77.66 which the respondents reasonably would have received had the depression not come along.

More salary material is found in Table II, in which all data are analyzed which concern beginning salaries of the coaches. This table should be read as follows: coaches who started work in the school year 1927-28 received an average initial salary of \$1822, ranging between \$1700 and

\$2100, the middle 50 per cent receiving between \$1700 and \$1900, while the median salary for the entire 1927-28 group was \$1710.

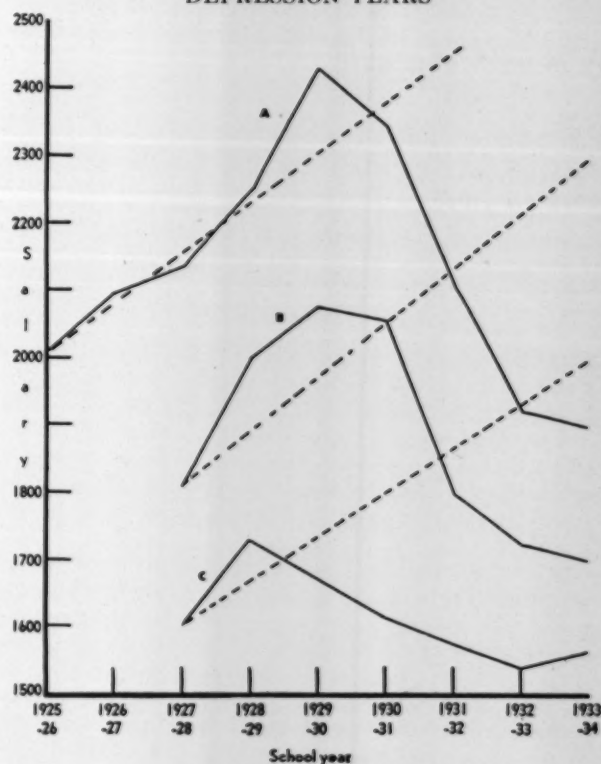
Correlations for three pairs of factors (see Table III) which it was reasonable to expect had some basis of relationship were computed by the Spearman rank-differences method. In this computation only data of one respondent from each school (the head coach, a total of 42) were used so that there would not be a duplication of the enrollment factor. The highest coefficient of correlation was found to be plus .65 for salary and experience, a relationship which is usually taken for granted. However, it might be generally thought that head coaches of larger high schools would get higher salaries than those in smaller high schools. In the 42 schools represented in

Table III the above supposition is not always true, as shown by the coefficient of correlation of plus .33 between salary and male enrollment, which coefficient while positive, is low. Salary depends to a still less extent on teaching load (correlation plus .20).

Extra moneys have been earned by many of the respondents in 13 different side-lines or activities outside their regular positions (Table IV). The

most popular activity in which the men have earned extra money is athletic officiating, which was reported by 22 men (33.8 per cent) who earned an average yearly sum of \$62.50 ranging in individual amounts from \$15 to \$300. The most lucrative single side-line was that of taking

FIG. A
AVERAGE SALARIES OF ARIZONA HIGH SCHOOL COACHES BEFORE AND DURING THE DEPRESSION YEARS



A—Men in service during past nine or more years
B—Men in service during past seven years
C—Men in service during past six years
Broken Lines—Normal average increment curves (computed from Arizona Educational Directory, 1930-31)

care of swimming pools, three men reporting an average of \$487 per year for this type of work, one of whom got as high as \$1,000 for the year.

Mr. MacIntosh's second article, to appear next month, takes up the teaching and coaching loads, education and professional training, and the recreational and civic interests of Arizona high school coaches.

TABLE II
ANALYSIS OF THE BEGINNING SALARIES OF ARIZONA HIGH SCHOOL COACHES EACH YEAR FROM 1927 TO 1934

| School Years | Average Initial Salary | Q ₁ | Median | Q ₃ | Range |
|-------------------------------|------------------------|----------------|--------|----------------|-------------|
| 1927-28..... | \$1822 | \$1700 | \$1710 | \$1900 | \$1700-2100 |
| 1928-29..... | 1608 | 1520 | 1540 | 1560 | 1350-2000 |
| 1929-30..... | 1840 | 1700 | 1710 | 2000 | 1700-2100 |
| 1930-31..... | 1486 | 1350 | 1423 | 1495 | 1350-1750 |
| 1931-32..... | 1456 | 1200 | 1520 | 1600 | 1040-1920 |
| 1932-33..... | 1262 | 1200 | 1275 | 1350 | 1000-1560 |
| 1933-34..... | 1412 | 1310 | 1380 | 1470 | 1100-1810 |
| Averages for seven years..... | \$1555 | \$1426 | \$1508 | \$1625 | \$1000-2100 |

TABLE III
CORRELATIONS OF PRESENT SALARIES OF HEAD COACHES OF ARIZONA HIGH SCHOOLS WITH (1) MALE ENROLLMENTS, (2) EXPERIENCE, (3) TEACHING LOADS

| | Coefficient of Correlation (Spearman) |
|---------------------------------|---------------------------------------|
| Salary and Male Enrollment..... | plus .33 |
| Salary and Experience..... | plus .65 |
| Salary and Teaching Load..... | plus .20 |

TABLE IV
ANALYSIS OF "SIDE LINES" IN WHICH ARIZONA HIGH SCHOOL COACHES HAVE SUPPLEMENTED THEIR REGULAR SALARIES

| "Side Line" Activities | No. of Men in Activity | Per Cent | Average Yearly Sums Earned | Range in Sums Earned Yearly |
|--------------------------------|------------------------|----------|----------------------------|-----------------------------|
| 1. Athletic Officiating..... | 22 | 33.8 | \$ 62.50 | \$ 15-300 |
| 2. Military..... | 4 | 6.2 | 235.00 | 50-300 |
| 3. Others (not specified)..... | 4 | 6.2 | 175.00 | 100-250 |
| 4. Swimming Pool..... | 3 | 4.6 | 487.00 | 200-1000 |
| 5. Summer Camp..... | 3 | 4.6 | 145.00 | 35-350 |
| 6. Summer Playground..... | 2 | 3.1 | 300.00 | 200-400 |
| 7. Summer School Teaching | 2 | 3.1 | 225.00 | 200-250 |
| 8. Coaching..... | 2 | 3.1 | 187.00 | 75-300 |
| 9. Mill Assayer..... | 1 | 1.5 | 450.00 | |
| 10. Teaching Night School..... | 1 | 1.5 | 280.00 | |
| 11. Accounting..... | 1 | 1.5 | 200.00 | |
| 12. Carpentry..... | 1 | 1.5 | 100.00 | |
| Playing Sports..... | 1 | 1.5 | 100.00 | |

DEFENSIVE PLAY IN FIELD HOCKEY

By Mary C. Morgan

Miss Morgan is chairman of the United States Field Hockey Association's Technical Committee, with headquarters at 408 South 45th St., Philadelphia. Her committee has many helpful aids for the coach in the form of printed material illustrated with diagrams and photographs; and a set of 16 mm. motion picture films on game techniques and umpiring.

THESE remarks on defensive play are addressed to the hockey coach of some experience. They are based on proven methods, and may be seen carried out in practice by any of the leading tournament teams. Philadelphia, where the game enjoys considerable popularity, might lay claim to the development of some of these procedures. There, twice a week during the fall, are held open practices for any girl over school age who wants to play hockey. There is no charge, there are no rules (except it is expected that players be physically fit), and practices are informal—some stick-work, more playing. These practices have become a kind of laboratory where individual and team problems may be worked out, and it is some of these findings that are being passed on to you with the hope that they will at least prove food for thought, if not entirely adaptable to your problems.

Skill in stick handling

First, let us take the backfield player as an individual, before we put her into a team. There are three main points to her game: Fielding, hitting, recovering. The first two involve a close co-ordination between body and stick and the third, control of the body.

Fielding the ball should be done with the stick carried out to meet the ball ahead of the feet to avoid kicks. When the ball hits the stick (which should be extended some distance in front of the player) then there should be that give which is the result of flexed wrists, and with the give the ball is allowed to come slowly toward the body, but right on the stick. A close analogy is the way a baseball is caught in front of the well-trained player and carried back in his glove until the force of the throw is gently spent and the return throw is uncoiled. If the defensive player in fielding the ball meets it too rigidly, with wrists stiff and tense, then the ball advances ahead of the stick, is out of control, and that defensive player is failing in offensive play, because she is not ready to find the opening for her forwards to

break through. By the time she has the ball under control the forwards may be covered, because her intentions are evident.

A hard clean hit is vital to a defensive player. That can be achieved by anyone who will practice her drives taking care that the position of the hands on the stick is correct, that the position of the feet is proper for getting off a clean drive, that the head is kept down when the actual drive is being made. The relation hitting has to offensive play is extremely important. A back with a feeble hit is a menace to her forward line, for she keeps bringing them back to their own goal and makes their task of starting an offensive just twice as hard. Yet how many backs we see enjoying their puny shots and being satisfied that they are playing good hockey! A clean drive down either alley is one of the most thrilling of hockey plays.

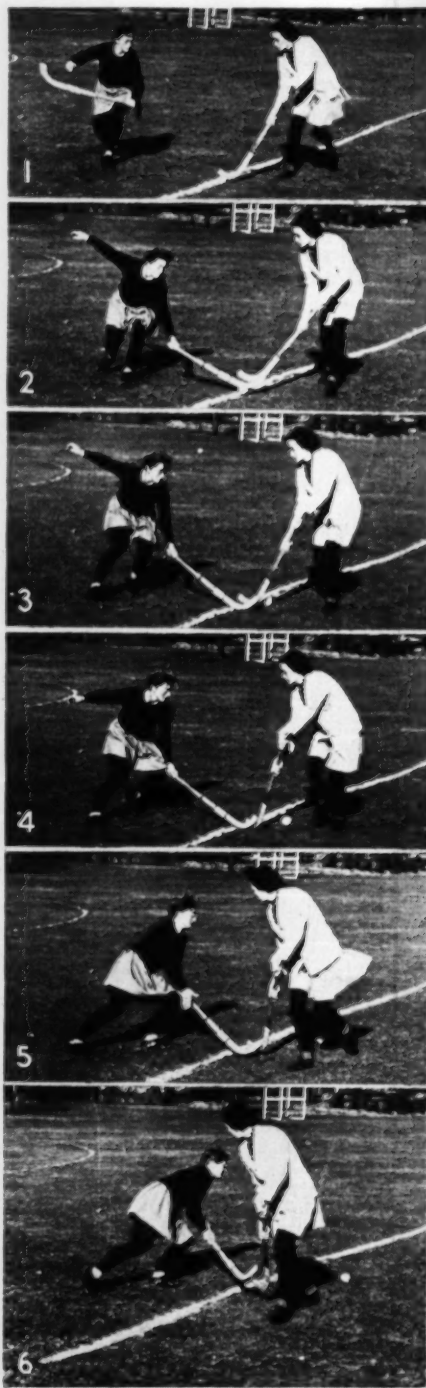
Faulty Recoveries

Another failure in offensive play that is registered against the backs, is that they do so enjoy hitting right to the sticks of the opposing backfield. Last fall at the Philadelphia practices this fault was much in evidence, but a sing-song refrain on the part of the coaches "Back to Back" repeated time after time, made the backfield snap out of this bad habit.

Recovery should be put into motion immediately. Too many backfield players like to watch to see if a teammate is going to do the job for her before they make an attempt to get where they should be. Too many players take four or five steps to turn around like

the old horse that plodded around the old-fashioned grinding mill. The quick graceful pirouette is the step that is needed here. A drill that develops the mechanics of this quick recovery is to have the players run and turn when the whistle blows. This is carried on repeatedly until the quick recovery is achieved.

One other individual quality that should be developed is the ability to cut through and intercept a pass from



Left-hand Lunge

The ambidextrous back has the proper weapon for taking the ball from a forward who has gotten away. Back in dark sweater; forward in white.

1. The left hand firmly grips the stick which is cocked for the stroke.
2. The stroke and lunge, contacting the ball and not hitting the opponent's stick. A remarkably deft maneuver.
3. The back has the ball under control. The beginning of the shift of weight.
4. The defensive stroke is converted into one of attack as the back times her change in direction with the play of the ball, and now has the forward off stride.
5. The back's right hand is placed on the stick, and becomes the dominating hand in the play of the ball.
6. In complete control of the ball, the back carries it until she finds the opening for a pass.

the opposing defense. A good eye, confidence in one's fielding, and confidence in one's teammates will cause a defensive player to come through and get control of the ball and then give it to her forwards in a way that affords them a chance to start a driving offensive. This relieves the forwards of the grinding work of advancing the ball deep from their own territory, and saves their wind and strength for the taxing duties which these shot-makers are expected to perform.

Goal-keeper as coach

Confidence is the keynote of team play in the backfield. Let a backfield feel sure of themselves—as do the fine English teams—and they can concentrate on offensive play. Let a center-half wander (if she is that kind of ego-centric who wants to cover the whole field) better that she take up golf; let a right back not place herself so that she can mark a rushing left inner; let a left back be drawn too far to the stick side of her right inner, and the whole backfield will reflect unrest.

But let a backfield know that their right or left back will be deep back patrolling the center of the field when the rest of the backs are on the offensive, then they can play confident that she will delay a counter attack by the opposing team until her teammates recover to strategic points. But let her play level with other back, and she will turn their hearts to tissue paper as they see the awful void between them and the goal-keeper. Another theory adopted in Philadelphia, one which should be used with discretion on the part of goalkeeper, is that the goalkeeper should make it her job to see that the backs *do not* play level. She also admonishes the back to mark, to stay to the right or the left a little further. As the goalkeeper can instantly tell where and how a forward is getting through, the direction of the defense is given her, even though she may not be the captain of the team. However, her directions must be quiet, not too frequent and in no manner exciting or disturbing to her teammates.

The oblique line formation

Too much importance cannot be put on the line that the defense takes, sometimes called the oblique line. The players *must* back one another up. Another question that is vital and about which there is often dispute is: when should a defense player go into an

opposing forward or half? The most accepted method seems to be to let the opposing player carry the ball until you know that the rest of your backfield is in that oblique line backing you up, then make her pass. The pass will probably be intercepted by a teammate who is all set and knowing where it is going.

For real defensive play then: observe the oblique formation constantly; avoid any playing level by the backs; have each back feel the responsibility of marking her opponent carefully (it is the stick that the back must watch). Watch the stick of the girl marked, and the position it is in is the clue to what to expect.

Another mark of finished team play is seen by the way backs combine to start an offensive. If one back has the ball and is unable to advance it to her forwards, let the other backs in a more happy position call for it and work it up the field in this manner. But always remember the position of the goal in relation to the back and never endanger this by working the ball across the goal.

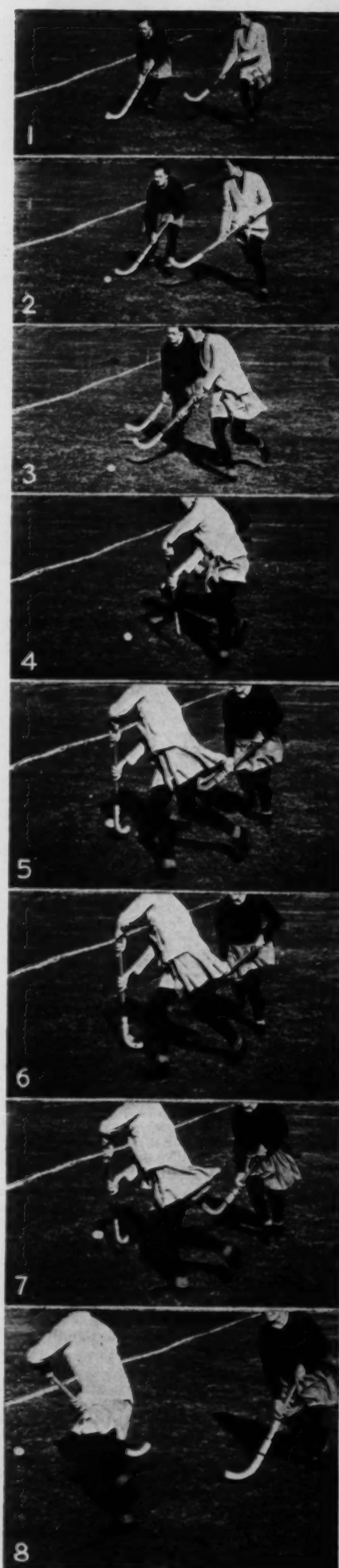
The best place to try to keep the ball when the defense is being pushed is in either alley, which alley depending on the strength of the opposing wing and where the center of play has been.

A goalkeeper tries to do this with her clears, and the defense should always be alert to pick up her kicks or drives and advance them out of danger.

Circular Tackle

The left back (in white) about to make the circular tackle, thus avoiding the frequent fouling on this side of the field.

1. The back sprints to get slightly ahead of her forward.
2. Striking off her outside (left) foot, the back starts her change of direction.
3. The completion of the first step in the circular movement, with the inside foot striking the ground, and the stick started on its play.
4. The position of the hands on the stick is an important factor in making a clean capture of the ball.
5. A still better view of the hands as the back's circular movement brings her closer to the camera.
6. The maneuver is kept free of personal contact by the back's timing her stride into and stroke of the ball with the roll of the ball as the forward plays it out in front of her.
7. Note the low position of the right hand on the stick, guiding the ball.
8. She's away! Starting an attack for her own forwards.



A PROGRAM OF HEALTH INSTRUCTION, II

By W. G. Moorhead

This is the second of Mr. Moorhead's series of articles on a program of health instruction for the high school, based on the curriculum set up by the Division of Health and Physical Education of the Department of Public Instruction, state of Pennsylvania, of which Mr. Moorhead is the chief.

IN the first article last month we stated the aim and the scope of the program, and listed the various topics or units of activity into which the program can be divided. This month we take up two of the units, Selection of Foods, and The Health of the Digestive System, and present the curriculum outline for them.

These two topics are perhaps the most readily learned by the students who see them as being closely related to performance in games and contests. This being the case, the instructor or coach has an ideal teaching situation which he can utilize for imparting knowledge of other health factors besides those pertaining to food and the digestion of food.

I. THE FUNCTIONS OF FOOD IN THE BODY

A. To yield energy

1. How energy from the sun is converted into energy in the body through the eating of vegetable and animal foods
2. Chief sources of energy. In foods containing
 - a. Carbohydrates, e. g., potatoes, cereals, bananas
 - b. Fats, e. g., butter, oils, the fat of meat, nuts

B. For growth and repair of the tissues

- Chief sources of tissue builders. In food containing
- a. Proteins, e. g., eggs, meat, peas, beans
 - b. Minerals, e. g., milk, green leafy vegetables

C. To regulate and protect body processes

- Chief sources of foods having regulative and protective functions. In foods containing
- a. Vitamins, e. g., milk, orange juice, green leafy vegetables
 - b. Minerals, e. g., green leafy vegetables, milk
 - c. Water, e. g., water, vegetables, fruit, milk

II. DIGESTION—The transformation of food for use by the body

A. Food changes in the mouth

1. Mastication
 - a. The teeth
 - (1) Functions, structure and care of the teeth
 - (2) Foods that help to build strong teeth
 - (a) High content of Vitamin C and calcium
 - (b) Foods requiring vigorous mastication

- (c) Importance to pregnant mothers of proper diet for building strong teeth
- b. The tongue
 - Means of tasting foods—aid in mastication and swallowing
2. Mixing the food with saliva
 - Saliva—secretion of salivary glands
 - Location, structure and function of these glands
- B. Food changes in the stomach
 1. Location and general structure
 2. Stomach as a temporary storage reservoir
 - Factors which effect length of time food remains in stomach
 - Kinds of food eaten, emotions, mastication, overloading, other factors
 3. Peristalsis—promotes mechanical reduction of food
 4. Continuance of salivary digestion of starches
 5. The secretion and functions of the gastric fluid
 - a. Secreted by glands of stomach
 - (1) Amount of secretion increased while eating and during period of digestion
 - (2) Secretion stimulated by taste and odor of food, emotions—cheerfulness, happiness
 - (3) Secretions inhibited by emotions of anger, fear, pain, worry or distaste for food
 - (4) Effect of stimulation or inhibition of secretions on the digestion of food
 - b. Composition and work of gastric fluid
 - (1) Hydrochloric acid
 - (a) Destroys some of bacteria swallowed with food
 - (b) Provides acid medium for pepsin to carry on its work
 - (c) Helps to regulate opening and closing of pyloric valve
 - (d) Swells protein fiber
 - (2) Enzymes
 - (a) Pepsin—action on protein; dependence on hydrochloric acid
 - (b) Rennin—action on protein part of milk causing coagulation
 - (c) Gastric lipase—may initiate the digestion of emulsified fats
 - c. Reduction of food to acid chyme
- C. Food changes in the intestines
 1. The small intestine
 - a. Structure of the absorbing surface
 - b. Means of support in the abdominal cavity

The Selection of Foods and the Health of the Digestive System

- c. Influence of posture on visceroptosis
- d. Peristaltic movement; rhythmic movements
- e. The action of the acid chyme in causing the pancreas, the liver and the intestines to secrete their digestive fluids
 - (1) The functions of the pancreatic fluid, bile and intestinal fluid
- f. Absorption of mineral matter through villi
- g. Absorption of water made up by secretions
2. The large intestine
 - a. Structure and position in body
 - (1) The caecum
 - (2) The appendix
 - Constipation and infected appendix—dangers of taking laxatives
 - (3) The colon
 - The importance of regular habits of evacuation
 - (4) The rectum
 - Excretion of feces
- D. The storage of food and changes in the liver
 1. Structure and location of the liver
 2. Secretion of bile
 - a. Function
 - b. Abnormal conditions—jaundice, gall stones
 3. The storage of glycogen until needed
 4. The formation of unused protein into urea
 5. Excesses injurious to the liver
 - a. Proteins in excessive amounts
 - b. Alcohol
- E. Substances resulting from digestion
 1. Simple sugars from carbohydrates
 2. Fatty acids and glycerin from fats
 3. Amino acids from proteins
- F. The excretion of waste products from foods
 1. Excretion from intestines through rectum
 2. Excretion of waste products of tissues by blood stream
 - a. Through kidneys in form of urine
 - b. The lungs in form of carbon dioxide
 - c. The skin in form of perspiration
- III. ABSORPTION—The passage of digested food from the alimentary tract to the blood
 - A. Through the capillaries in the walls of intestines into portal circulation
 - B. Through lacteals in walls of small intestine into lymphatic system
 - C. Summary of absorption
 1. Stomach
 - a. Limited absorption of food-stuffs—some protein and sugar
 - b. Marked absorption of alcohol



The school cafeteria provides both a supervised diet and low cost meals. (Cooley H. S., Detroit)

2. Small intestine

- a. Fats by lymph system; sugars and proteins by portal circulation to liver where changed to glycogen and stored minerals and water
- b. Greatest organ of absorption

3. Large intestine

- a. Limited absorption of digested foodstuffs
- b. Marked absorption of water

IV. METABOLISM—The uses of absorbed food in the cells

A. Functions

- 1. Growth and repair of tissues
- 2. Release of energy

B. Factors affecting metabolism

- 1. Oxygen absorbed from lungs
- 2. Enzymes secreted by tissue cells
- 3. Autacoids secreted by ductless glands

Effects of secretions of certain ductless glands on nutrition

a. Thyroid gland

- (1) Location
- (2) Excess of thyroid secretion (hyperthyroidism). Produces exophthalmic goiter
- (3) Lack of thyroid secretion (hypothyroidism). May result in goiter, cretinism or myxedema
- (4) Use of iodine in treatment of thyroid disturbances should always be under direction of physician
- (5) Secretion influences general rate of oxidation

b. Parathyroid glands

- (1) Location
- (2) Concerned with calcium metabolism in body
- (3) Help maintain acid base equilibrium of body
- (4) Neutralization of toxic compounds normally produced in metabolism

c. Thymus gland

- (1) Location. Temporary or-

gan. Disappearance at puberty

(2) Function

d. Adrenal gland

(1) Location

- (2) Under intense emotional stress—(fear, anger, pain)—increased secretion discharged into blood. Affects autonomic nervous system, may inhibit flow of digestive juices

- (3) Helps maintain tone of blood vessels

e. Pituitary gland

(1) Location

- (2) Influences growth of skeleton
- (3) Helps maintain tone of smooth muscular tissue and influences activity of kidneys

f. Pineal body

(1) Location

- (2) Function—not definitely known. Thought to furnish secretion that inhibits growth of reproduction organs

4. Vitamins furnished by foods

5. Nerve control

V. FUNCTIONS AND SOURCES OF ESSENTIAL FOOD ELEMENTS IN RELATION TO NEEDS OF BODY

A. Carbohydrates

1. Functions

- a. Help to maintain body temperature
- b. Furnish main source of energy for muscular work and nutritive processes
- c. Protect body tissues by forming reserve fund for time of need (Glycogen)
- d. Excess converted into adipose tissue

2. Kinds

a. Cellulose

- (1) Source—fibrous parts of plants
- (2) Valuable as roughage to aid mechanical action of

intestines. May relieve constipation.

b. Starch

- (1) Excess sugar stored in liver and muscle tissue in form of glycogen. Available as reserve supply of energy.

- (2) Sources—potatoes, peas, beans, cereals

c. Sugar

- (1) Excess converted into fat and stored as adipose tissue. Reserve supply of energy

- (2) Advantage of natural sugars over refined sugars

- (3) Sources—grapes, honey, sugar cane

- 3. Chief sources of carbohydrates: cereals, fruits, vegetables

B. Fats

1. Functions

- a. Serve as fuel, yield heat and other forms of energy. Concentrated form of energy

- b. Stored in tissues to be used for energy purposes as needed

2. Chief sources

- a. Foods—cream, butter, nuts, oils and fat of meat. Differ widely in vitamin values. Should not be selected for energy value alone.

C. Proteins

1. Functions

- a. To build new tissue
- b. To repair oxidized tissue
- c. To less extent to serve as fuel to yield energy in form of heat and muscular power

2. Chief sources

- a. Animal protein—milk, eggs, meat, fish
- b. Vegetable protein—peas, beans, lentils

D. Vitamins

General characteristics

- 1. None have been isolated in pure chemical forms from nat-

[Continued on page 37]

COACHES' ASSOCIATIONS

News and comment from high school coaches' associations

This department, inaugurated last month, will be a regular feature of *Scholastic Coach*. All high school coaches' associations are invited to participate.

Missouri

THE second annual football clinic sponsored jointly by the University of Missouri and the Missouri High School Coaches' Association was held Aug. 24 in Brewer field house in Columbia with about 150 Missouri coaches in attendance.

The clinic was directed by Coach Don Faurot and his assistant Chauncey Simpson of the University assisted by Jimmy Conzelman of Washington University, Emmett Stuber of Southeast Missouri State Teachers College, Dr. D. A. Hindman, professor of physical education at Missouri, and George Edwards, basketball coach of the University.

Conzelman talked at length on the manner in which the adoption of the National Federation football rules would affect high school football in Missouri. He warned his audience not to try too many new and trick formations, pointing out that "a thousand to one you won't find anything good that way."

Emmett Stuber talked on the forward pass, a weapon his teams have always used successfully.

Don Faurot discussed line play and demonstrated his talk with several members of this year's varsity squad. His backfield coach, Chauncey Simpson, put on a good demonstration of backfield play, stressing blocking and kicking.

The meeting was terminated by a lively discussion of the new National Federation rules led by George Edwards.

Oppose Federation rules

The Board of Control of the Missouri High School Coaches' Association met in Columbia Aug. 24 to lay plans for the activities of the Association during this school year.

The Board went on record as being opposed to the existence of a second set of football rules, and expressed the opinion that one set is all that is necessary. The Official Interscholastic Rules of the National Federation of State High School Athletic Associations are the rules officially adopted by the Missouri State High School Athletic Association. The Board of Control of the Coaches' Association is not opposed to the National Federation rules because of the changes these rules have made from the National Collegiate A.A. rules, but only because the publication of a second rule book is deemed unnecessary. The Board made no attempt to solve the problem as to how high schools could get the changes they desire in the rules incorporated into the N.C.A.A. rules in the framing of which the high schools have no representation, but left this matter to those who are in a better position to know the difficulties involved. The Board of Control

simply wanted to register its disapproval of the existence of two rule books, and express the hope that something will be done to remedy the situation.

Arrangements were also made for the organization meetings of the district associations at the district teachers' meetings this month.

Those present at the Board meeting were President Reaves Peters, Kansas City North East; Secretary C. E. Potter, St. James; Lee S. "Bob" White, Lebanon; Bill Herrington, Trenton; D. A. Pierce, Moberly; W. H. "Bill" Lyon, Marshall; Ed Ellis and George Stuber, St. Joseph; W. N. "Bill" Collins, Joplin; Fred Schwengel, Kirksville; W. E. "Peg" Mahew, Sikeston; and Lon Wilson, Rockport.

Free admissions

Don Faurot, athletic director of the University of Missouri, has notified the writer that the University will admit members of the Coaches' Association to all home games (all sports), as guests of the University.

The members will be admitted at the pass gate by showing their Coaches' Association membership cards and paying the tax.

All high school coaches in the state should watch for the organization meetings of their district association to be held during the district teachers' meeting. Make it a point to attend these meetings to vote for officers for the new term.

The dues for the 1935-36 school year will be due at that time. They are only 50c per year for which members receive the privilege of attending the University home games, a year's subscription to *Scholastic Coach* and opportunities for fellowship with their colleagues in the coaching profession.

Basketball Clinic

George Edwards, basketball coach of the University, is laying plans for the annual basketball clinic which will be held Dec. 14 at the University. Edwards plans to have the meeting run from one o'clock until five in the field house, to be followed by a

banquet of the members of the Coaches' Association at six o'clock, and election of officers. After dinner the coaches will see the St. Louis University-Missouri basketball game. These plans are of course in the tentative stage at the present time and further details will be published in the Missouri column, November issue of *Scholastic Coach*.

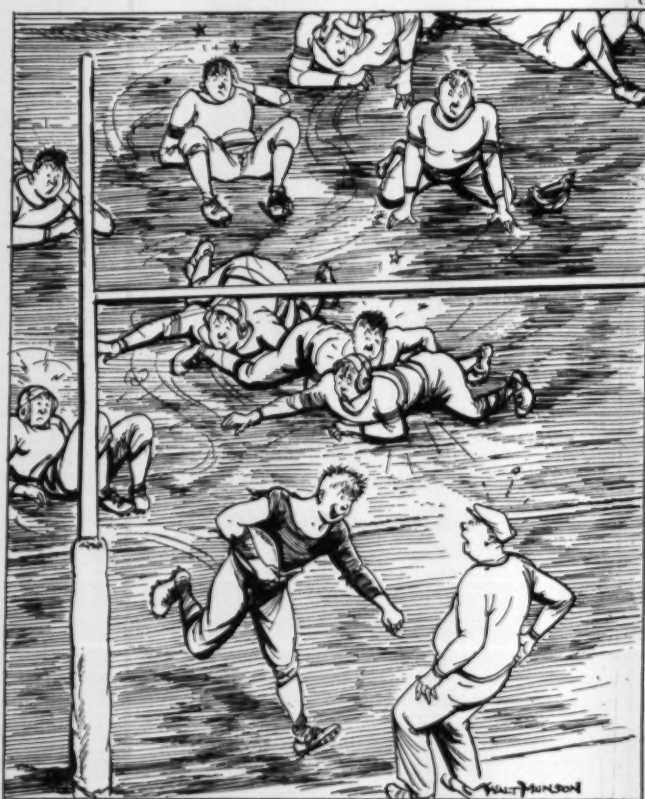
Jimmy Conzelman of Washington University has suggested that some provision be made for the selection of an all-state high school football squad at the close of the 1935 season. Conzelman said that "Missouri high school football was generally far below the average of that of our neighboring states, and that the selection of an all-star team would tend to make better football in the high schools of Missouri." What do you think of this Mr. High School Coach?

Track coaches will be interested to hear that Chauncey Simpson, new Missouri U. track coach, is laying plans for a clinic next spring. He wants to have the clinic on the day of the Big Six indoor meet which will be held in Columbia this year.

Where they are

Lloyd Turbeville, coach of the regional championship basketball team at Bismarck, goes to Ironton as principal and coach of athletics, replacing R. H. Garnett who was elevated to the superintendency. Carl Fox of Central Wesleyan Junior College has been elected coach and principal at Bismarck.

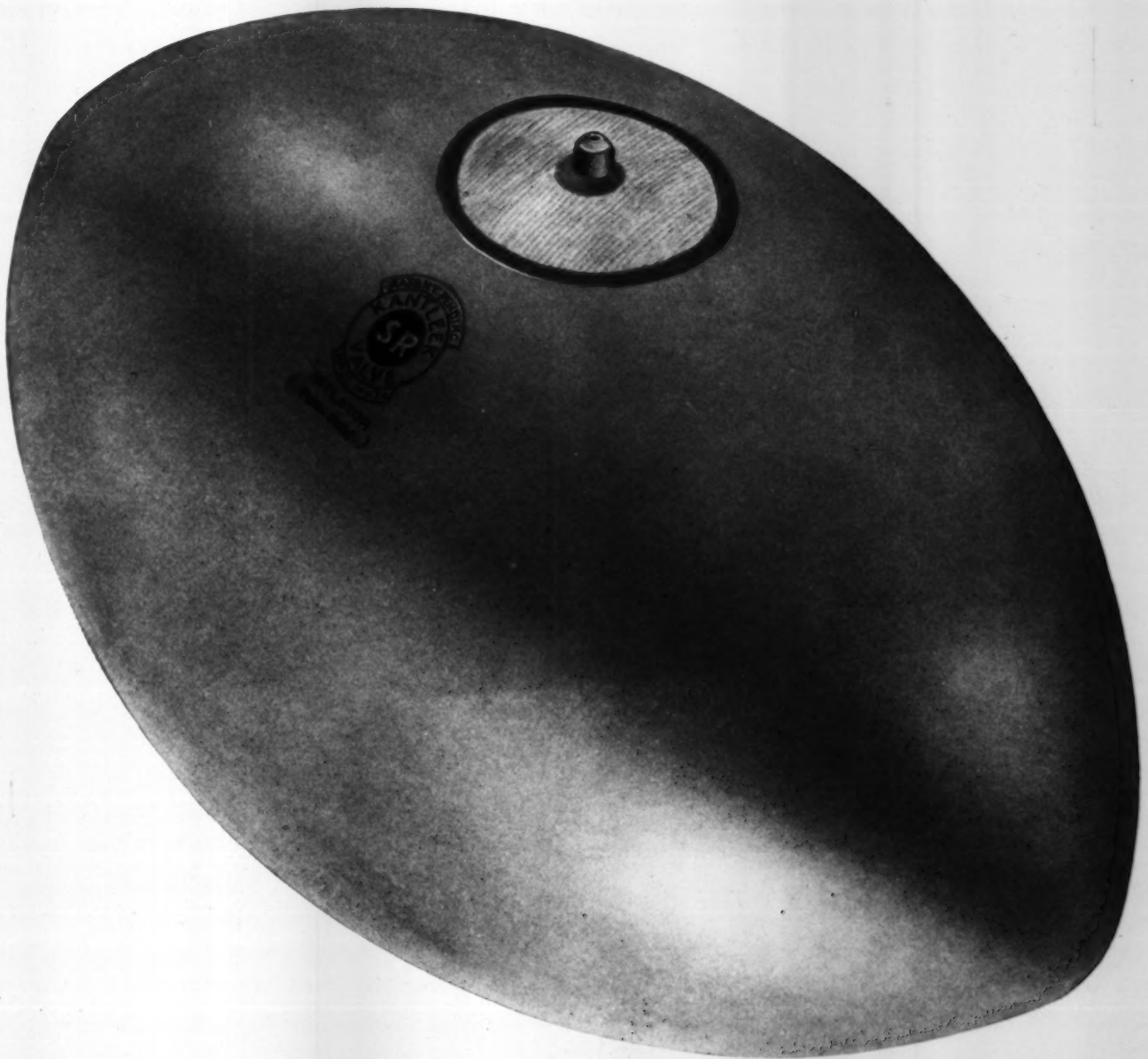
A. E. Powers, coach the past year of Festus High School, has been elected superintendent of schools of Jefferson county. He will be succeeded by Melville Skoog of Esther. Ray M. Hardy of Doe Run will be the new coach at Esther. His



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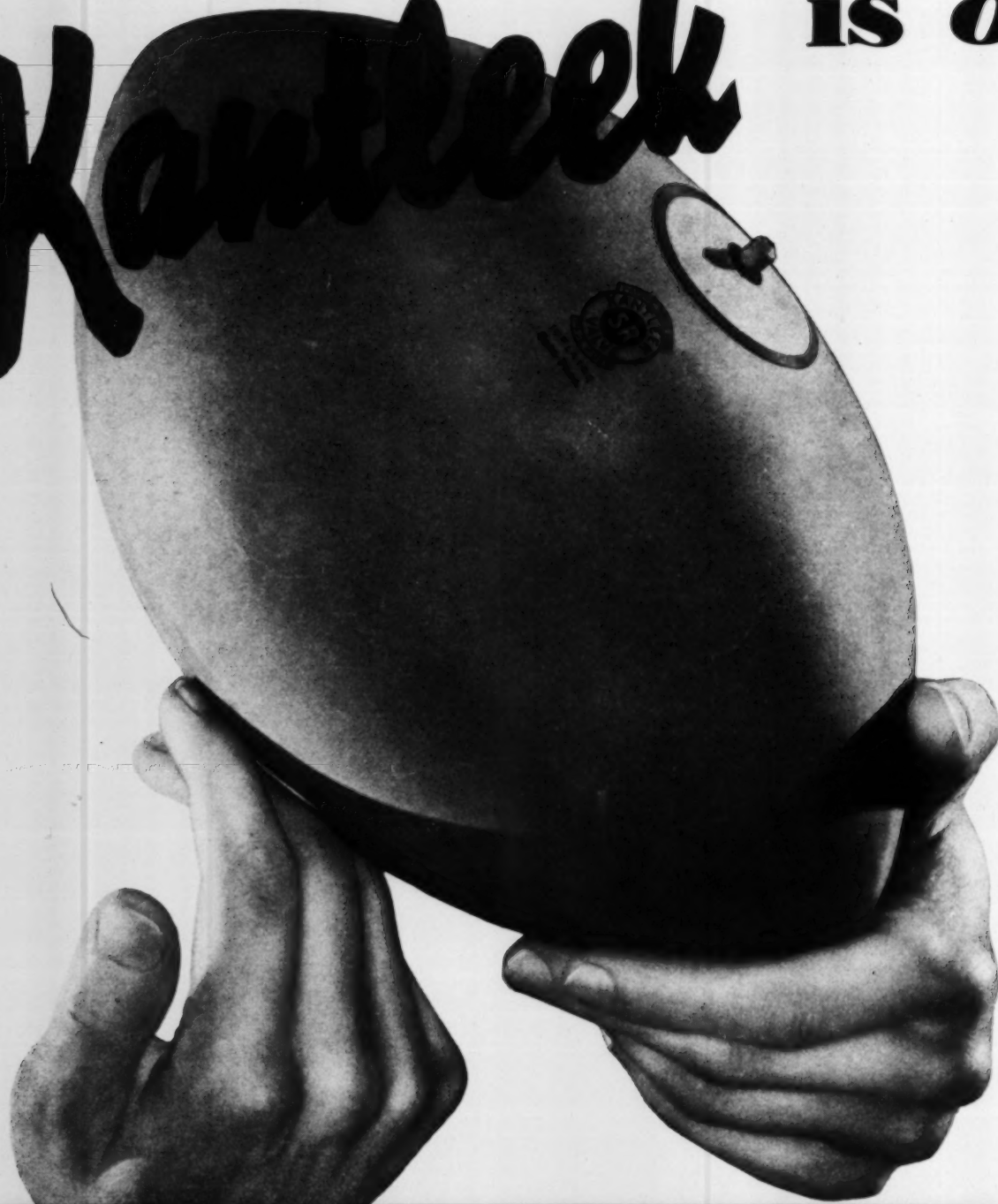
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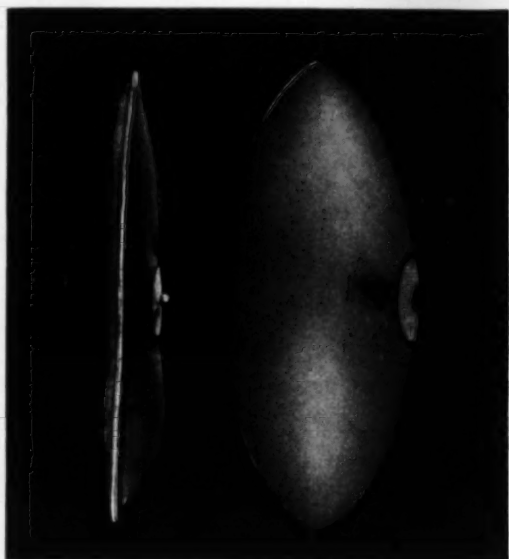


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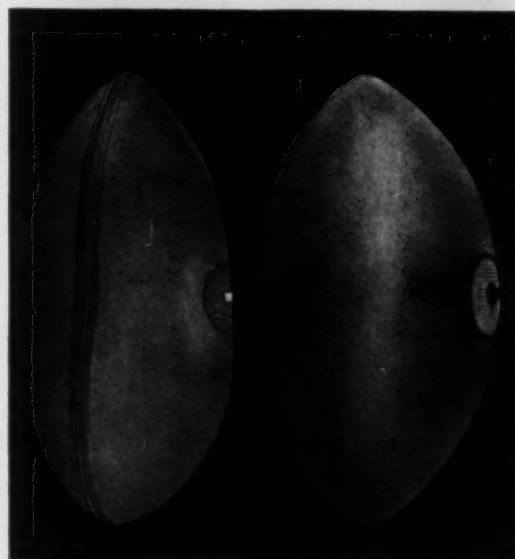


Left

Notice how distortion has already started in the partly inflated two-piece bladder. Thin spots grow thinner. Look at the partly inflated Kantleek Bladder (right). Always the shape of the ball. One-piece, seamless construction eliminates thin spots at any inflation . . . no strains, longer life.

Right

See how the ordinary two-piece bladder distorts when inflated to Official ball size. Its uneven walls chafe, and thin spots give way after limited use. But the Kantleek Bladder (right), inflated to Official ball size, is perfect ball shape. No thin spots to rupture. No seams or patches where strain can cause leaks.



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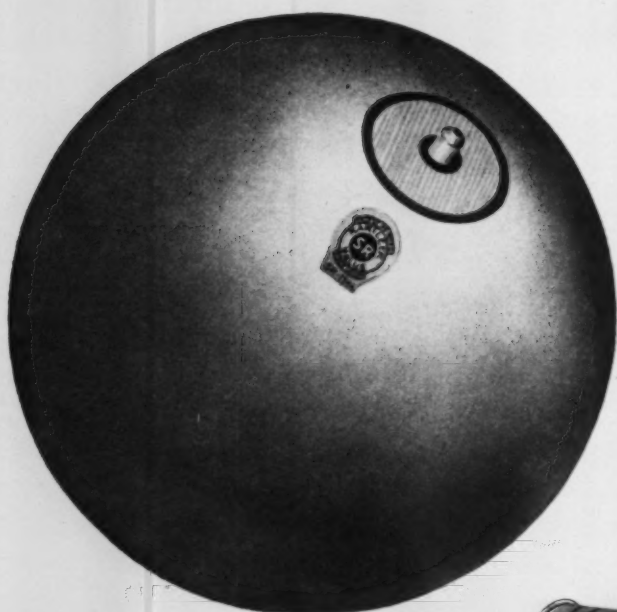
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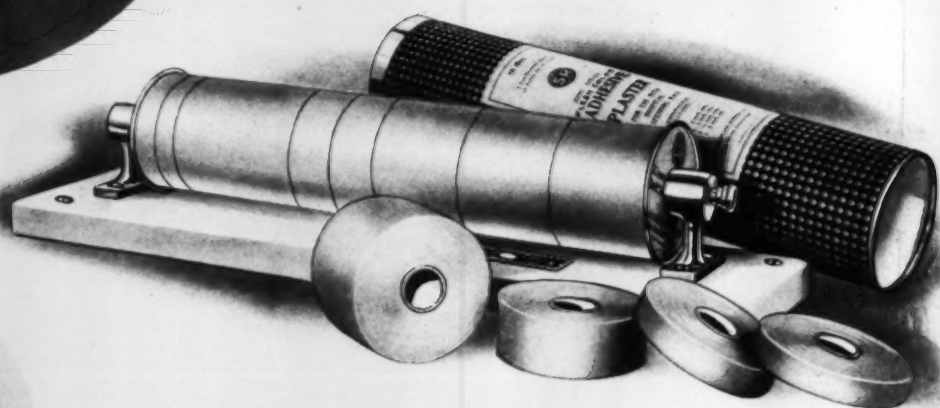
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Coaches' Associations

successor at Doe Run has not been elected.

Robert Talbert, basketball and tennis coach at Farmington, goes to Cape Girardeau Central as social science teacher. L. L. Forshee of Benton will fill the vacancy at Farmington.

Clarence Dalton, Cape Teachers track star, will take over the coaching duties at Leadwood. Bryan Caviness, former coach, will be retained as manual training instructor.

George Koch, former Rolla athlete, will have charge of the high school basketball team at Flat River, allowing A. J. Bernard to concentrate on the junior college team there. Flat River won the state junior college title last year. The state meet in 1936 will be held in Flat River the third week in February.

Roland Jones of Cape Teachers will be the new coach at Potosi, taking the place of F. V. Ricketts, who was elected principal of the Potosi schools.

The Mineral Area coaches will hold their first meeting of the year at Bonne Terre, Thursday evening, Oct. 3. All coaches in Jefferson, Ste. Genevieve, St. Francois, Washington and Iron counties, please note.

George Ryden, who has been Principal and coach at Washington, is now principal at Boonville. Bob Blankenbaker handles athletics at Boonville.

V. N. Willoughby of Maryville, who has been traveling for several years with Snowden-Mize Sporting Goods Co. of Atchison, Kan., is now coaching at Albany. He was married this summer to Hollie Smith of Maryville.

Carol Russell of Trenton High was married to Jerry Davenport of Trenton this summer. They spent their honeymoon in the Ozarks.

Ed Ellis, who has been at Liberty for four years, is now at St. Joseph Central. He is assisted there by George Stuber, formerly of Carrollton. Ellis is assistant in football and head coach in basketball.

Harry Lee, former coach at Independence, is assisting P. B. "Pop" Springer at St. Joe Benton.

Howard Iba, formerly at Conception, is now basketball coach at Cameron. Mack Ruth, former assistant at Cameron, is now head coach of football, replacing G. Bourette.

Leon Ungles, former Lexington coach, is now athletic director of Wentworth Military Academy, Lexington. Mike Haggard, former Brookfield coach takes Ungles' place at Lexington.

James Chevalier, coach at La Plata last year, was elected at Mountain Grove to succeed John "High" Simmons. This was one of the most sought-after jobs in the state.

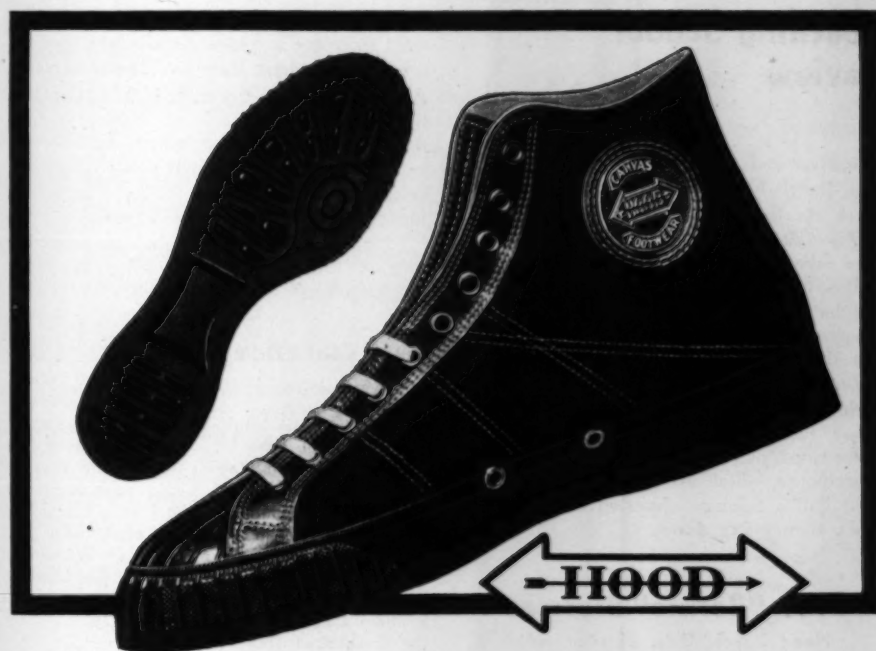
Jim Rollen, graduate of Springfield High and St. Louis University, was named to succeed Carl West as director of athletics at Willard High School. West resigned to accept a similar position at Versailles.

C. E. POTTER

Texas

THE membership of the University of Texas Interscholastic League is in the midst of no little turmoil at the present because of a recent ruling of the executive committee stating that all students who reach their eighteenth birthday before Sept. 1 are ineligible for competition. The

[Continued on page 40]



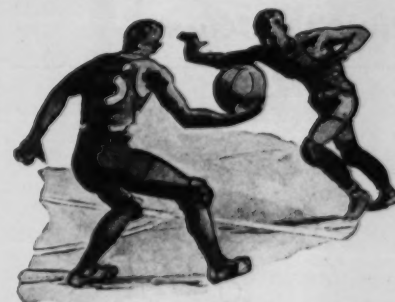
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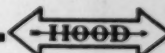


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Coaching School Review

[Continued from page 10]

offensive ends on the line, or else have men hurry back to the punt-receiver and work on the ends from there.

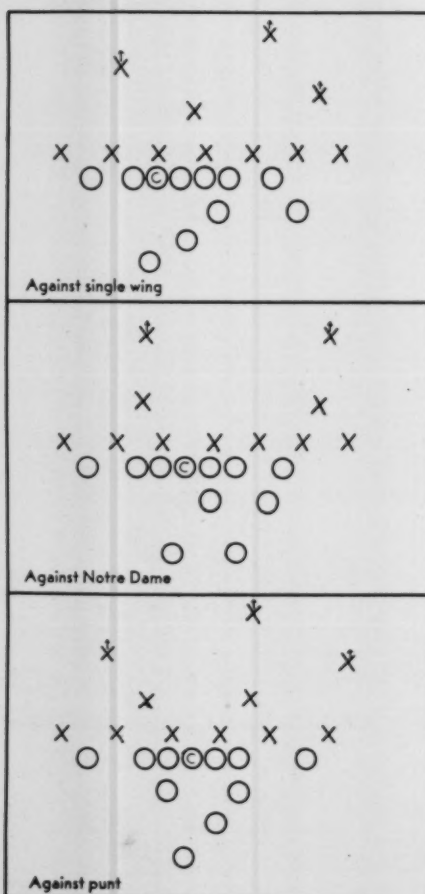
Tip-offs that a team is going to pass. The down, the time and the score are primary tip-offs, but they cannot be depended on too heavily in these days of surprise plays. Bear these factors in mind, but do not count on them. More reliable tip-offs are: Ends crossing the line of scrimmage; guards dropping back; give-away movements of the passer, though these must not be mistaken for fake pass movements, which are usually pretty obvious; backs taking a hurried crack at the ends, then going down.

B. W. "Bernie" Bierman

Head Coach, Univ. of Minnesota

COACH BIERMAN'S comment on his defenses diagrammed on the right: Our line will always play according to the offensive line positions, and our secondary according to the offensive backfield. Exception: our entire line may shift one man over to either right or left, in which case the shift of power on the line will be compensated by an opposite shift of our secondary—perhaps by moving only one man. The above applies to all ortho-

Bible's defenses



dox formations, and we would make the shift in order to place greater strength at some point where they have been gaining. An alternative to the shift is to strengthen that point in the line by sending in a substitute. But your best man may already be in there, and showing no signs of fatigue! He is simply being outplayed. Hence the shift.

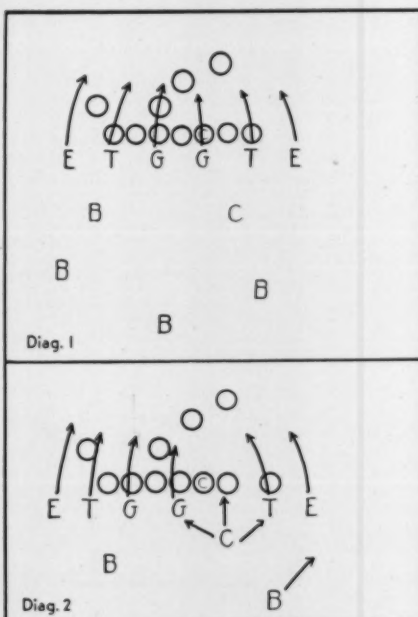
[See Bierman's article on the offensive side of this problem: "Shifting to Meet All Defenses," page 11—Editor.]

Clarence W. Spears

Head Coach, Univ. of Wisconsin

The Wisconsin High School Coaches' Association put on their first coaching school this year at Wisconsin Rapids, and did it so successfully that plans are being considered to lengthen next summer's school to a full week. This year it was a three-day affair, with Dr. Clarence Spears of the Univ. of Wisconsin and "Red" Dawson, assistant to Bierman at Minnesota, giving the football courses; and William Chandler of Marquette Univ. giving the basketball. The following report on the football has been prepared by Louis E. Means, president of the Coaches' Association.

Defensive line play. Dr. Spears believes that a 6-man line should bring better results than a 7-man line in high school football. Thus, with virtually three backers-up, all six linemen can be sent charging in. All six men should have as their objective the quick smashing of every play. Ends, tackles, and guards should charge fast into the offensive backfield and strip it of all interference. If these six men fail to make the tackle it is all right, as the close secondary is then in position to make clean tackles without fear of blockers. Dr. Spears feels that it takes much more experience and science to play a 7-man line, where tackles and

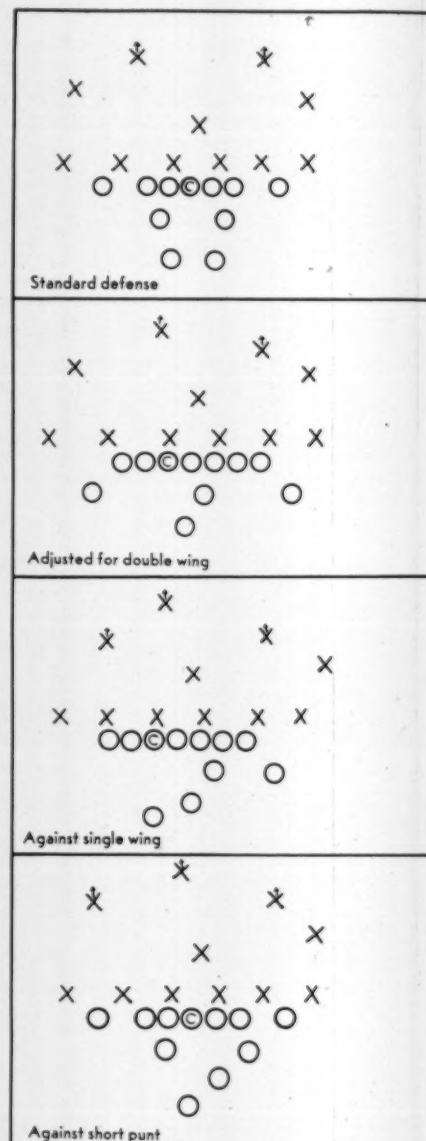


6-Man Defensive Lines by Spears

Diag. 1—The regular six. "All men have their own territory to cover in a brutal charge to a point behind the tail-back."

Diag. 2—The over-shifted six, "which might well be applied against a team which seldom uses its reverse or weak side plays."

Bierman's defenses



ends must team together and vary their play, and centers work both in and out of the line. Spears diagrammed two types of 6-man line defenses as shown in diagrams 1 and 2. In Diag. 1 is shown the regular six, with all men spaced evenly from end to end. The position of the backs might vary slightly with the formation of the opposition. All men have their own territory to cover in a brutal charge to a point pictured behind the tail-back. In Diag. 2 is shown the over-shifted six; which might well be applied against a team which seldom uses its reverse or weak side plays. The positions of the defensive linemen are the same as in a 7-man line, except the center plays a yard or so back of the weak side hole, where he can readily advance into the line, and is in a much better position to pull back and move laterally for wide plays and passes than if he were in the line.

Coach Spears feels that too many coaches have their offense work on the defensive ends and tackles in the same, repetitious way. There should be a departure from the usual system of having the strong side guard working with the quarterback on an end on off-tackle plays and

end runs, and of having the quarterback and fullback on the end together—or whatever system is used. Whatever it is it should allow for a change in the assignments on certain types of plays, so that a defensive man cannot determine for a certainty what to expect by the identity of those blocking him. One way to mix it up is to have the guard and quarterback both move directly toward the end, and just as they come to him, fake a shoulder block (by a head duck), split and go on past him to the secondary, as the fullback mows him down. The next time these two can hit him, or one of them and the fullback can hit him. The end will never know who is going to hit him, and in addition to throwing him off from anticipating the play, it will keep him much busier in trying to stay on his feet. While he is looking here he will be cracked there.

"Red" Dawson

Backfield Coach, Univ. of Minnesota

"RED" DAWSON, backfield coach at Minnesota and a quarterback under Bierman while at Tulane, went into the defensive and offensive methods which last year stamped Minnesota as one of the leading teams in the country. Dawson explained the intricacies of Minnesota's offense, which consisted of a shift into any of six or seven formations, which afforded different blocking angles for various plays in series. On the new Minnesota shift, the ends first move out in an effort to manœuvre the defensive tackles. The shift moves on a three-step basis. Each man starts with the right foot when going to the right and the left foot when going to the left. Most of Minnesota's formations are modifications of the single wing, with wingback and end split, or tight, or deeper than usual.

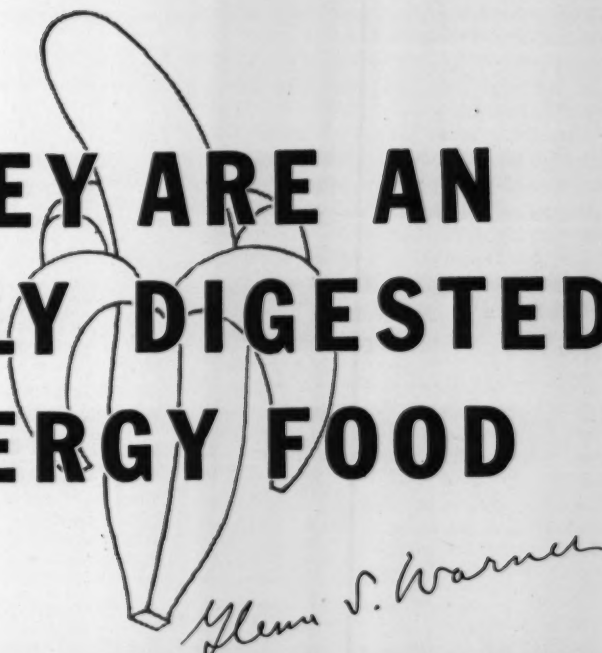
Minnesota favors a near 6-3-2 defense against the single wing offense, with the fullback in the middle and a little closer than the two wing backs. Minnesota uses a combination man-for-man and zone defense. Against the Notre Dame style they favor the 6-2-2-1, with more zone emphasis. Against the punt formation either a zone or man-to-man may be used with 6-2-2-1. The tackles play inside the offensive ends, and the short backs play directly behind the outside shoulders of the middle five offensive linemen. The second pair of defensive backs play well outside the defensive ends. Against the double wing game a straight 6-3-2 defense is preferred, with the deep backs shifting across to help the short backs when three men flood one side.

Lou Little

Head Coach, Columbia Univ.

UNDER the auspices of the *New York Herald Tribune*, Lou Little gave a one-week's course in his own system of football, and did a thorough job of it to the satisfaction of 200 invited high school and prep school coaches. His first assistant, Herb Kopf, took the platform for part of one session to diagram several plays and explain how assignments

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Coach, Temple University
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would be varied in executing the same play under different circumstances, the variations being determined by the way key defensive men had responded to previous treatment.

One thing more than any other distinguishes the Columbia team from most teams: This is the nature of its defensive line play. From end to end the Columbia line plays low, down on four points, makes a low hard charge no different than its offensive charge, and does not use the hands until the initial head and shoulder contact has been made and the defensive charger is across the line.

This charge, which is the marrow in the backbone of Columbia's strength, is made from a stance with one foot slightly in front of the other, the back of the neck and the spine in line, the tail down, the head up and eyes straight ahead. The blocker aims his head at the solar plexus of the opponent. "We aim to strike the opponent in his stomach, or just above it, with the top of the forehead, neck held stiff, back straight, legs pumping like pistons," Coach Little said. "We aim the head at him, rather than the shoulder, so that when the head misses the shoulder will catch him."

Lou Little's teams have never had a serious neck injury. The players condition their heads and necks to this strain by neck exercises. Wearing his headgear, a

player will move and wriggle his stiffly held head against the outstretched arms of a teammate.

The principle of the low, hands-off defensive charge is to hit the other fellow before he hits you. Lou Little speaking:

"Our defensive linemen charge through to the ball, never turning parallel with the line of scrimmage. We spend hour after hour teaching them to charge. We don't expect them to make tackles, but each must cover his own territory."

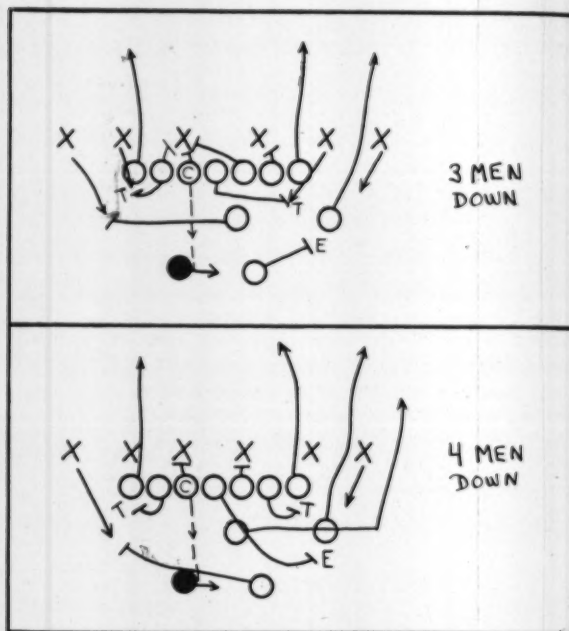
"We teach all our linemen, even the center, to charge with either foot forward and we insist that they vary their position to suit the occasion. The defensive tackle, for instance, when he plays on the outside shoulder of the offensive end, should start with his inside foot back. In this way he will present his 'strong knee' to the end when he makes his charge. His next step, moreover, will present another 'strong knee' to the wingback.

"We even require our center to vary his starting leg according to what he has to do. We make him take his passing practice with a defensive guard playing opposite him so he will learn to pass, lift his head and charge in one motion."

Do Columbia defensive linemen always get down on four points? Here is Little's answer to that:

"We allow latitude in all things. In the beginning we insist that a lineman shall play our way, starting from a four-point stance and driving in, but if an experienced man can get the results we want we let him play his way as long as he makes a success of it. If he doesn't make a success of it he must go back to our way or come out of the game."

"As I have told you, our linemen normally charge low and do not use their hands on the defense. We want to settle the opponents on their heels and we want to keep driving when we make contact. You say to me, 'What happens when you meet a line that plays the same way?' The answer is that we teach a dip charge for use in such a case. Steve, do a



Protection for the passer

Columbia's protection for the passer varies with what is known of the opponents' pass defense, and how it has been functioning that day. The above diagrams are two commonly used plans for protecting Columbia passers. Columbia, and who doesn't, likes to send five receivers down, but usually cannot afford to expose the passer as this would necessitate. Concerning the above, Lou Little said: "The passer's first three steps are as though he were going off tackle or around end. On the third step, as the inside foot strikes the ground, the passer back-steps with the outside foot, and cocks the ball for the pass. He doesn't run away from his protection. If it is to be a running pass, the protection moves with him. After throwing the ball, the passer immediately puts his hands out for protection, and hops straight back. Then, he prepares himself to give ground in case the pass has been intercepted, so that he can be free to move toward the ball-carrier. Sometimes we may ignore setting up protection on the weak side when it is a running pass to the strong side. This would free another man to go down as a receiver. If the strong side defensive tackle is extra good and a strong charger, the right guard, in the first plan above, and the outside tackle in the second plan, must meet the tackle deeper. If the center can handle the guard alone, another man is free to go down (second plan above). Receivers fake and cut, and this faking and cutting is planned in advance. The passer throws the ball as the fake is being made, not after it has been made. The passer looks at the decoy. These are fine points in timing that have to be gone over and over in practice against opposition."

dip charge."

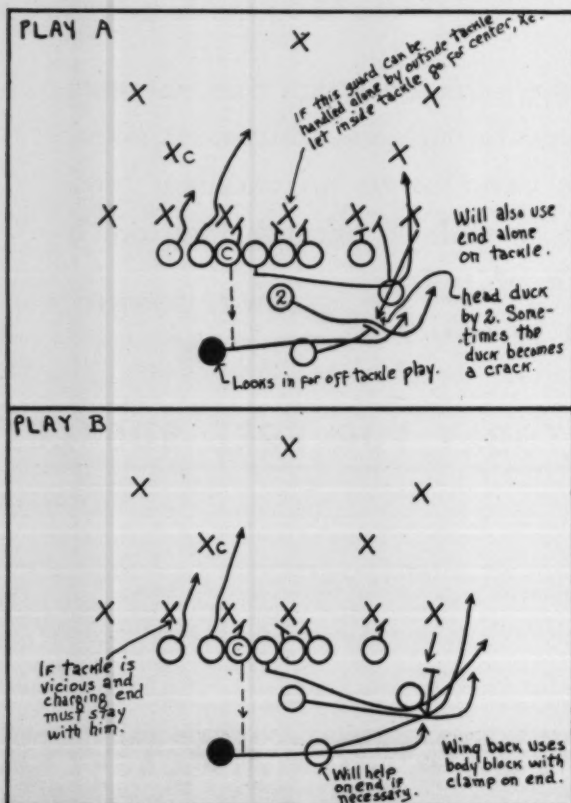
Steve Grenda, former Columbia player, now one of Little's assistants, took the stance as Coach Little played the part of an offensive lineman. Little played as low as he could get. At the snap of the ball, Grenda faked a normal head charge, then quickly ducked and came up under his chief, his shoulder caught solidly against Little's side.

Doesn't even the defensive end use his hands? No. Not on the initial charge. Using his hands encourages him to give ground. The ends take one step across, and drive straight through into the interference. They do not worry about making the tackle. If the end forces the ball-carrier to swing deep he has done his job well. The end should not retreat with the interferers, and try to run around them to get at the ball-carrier. Never. He should crack up the interferers by ploughing right into the one in front—a head

Two end runs by Lou Little

Diagrammed by Herb Kopf

Identical end runs, as far as the ball-carrier is concerned, in which the defensive left end is handled with variety. In Play A the No. 2 back head-ducks him, coming so close that if he does hit him it's all right, while the main responsibility for getting him is the No. 3 back's. In Play B the No. 2 back goes at the end the same way, and he may or may not head-duck, but the main responsibility for blocking the end is the wingback's. This wingback moves back, and then cracks the end. If he misses him the No. 3 back will help out.



and shoulder plough, straight through him. This may cause two others, including the ball-carrier to fall; or, next best, it will break their stride! or next to that, will force the ball-carrier out of his charted path, making it an easy job for the secondaries coming up.

Other gems from Lou Little's lectures:

Straight-arm. Some ball-carriers have the idea that a straight-arm can be effective if you hold it out as you run along. This isn't a straight-arm; it's an invitation to a tackle. The tackler can reach out and grab your straight-arm as he would a handle. Ball-carriers who want to use an effective straight-arm should carry the free arm close to the body, elbow bent, as a boxer carries the one he isn't using at the moment. Then when a would-be tackler comes along give it to him—a short jab with the heel of the hand against his head. That's a straight-arm he can't hold on to.

Blackboard drills. Lou Little rarely uses them. In daylight he would rather put in the time in actually going through the plays on the field. At night the boys have had too much football for that day, and they are in no mood for any more.

Tackling practice. Lou Little is against it. It is usually half-hearted if it is done as a drill, the tackler not wanting to hit the ball-carrier too hard, and the ball-carrier not wanting to be hit hard. Little is also opposed to falling-on-the-ball practice. It is useless. The players ought to be in condition at the outset to go into the hard work.

High school ends. They don't seem to care how many plays run inside them, just as long as none go to their outside. So you can gain plenty of ground against these fellows by cutting inside them and seeing that the tackle is well taken care of.

Movements of the line backers-up and players in third line of defense. As the play is developing these men cannot afford to move in a line parallel to the line of scrimmage. They must move in a diagonal, always keeping the ball as the terminus of that diagonal. For instance, in Play A, if the defensive center, Xc, backing up the weak side, were to move straight out on a line parallel to the line of scrimmage, where would he be if the play developed into a cut-back or a reverse? So, don't worry about having to block him on runs to the opposite side. If he does go running over there, it is your quarterback's signal for a check play into his proper territory.

Justin M. "Sam" Barry

Basketball Coach, Univ. Southern Calif.

Sam Barry headed the staff of instructors for the seventh annual Indiana Basketball School conducted at Logansport, Indiana, under the direction of Clifford Wells. The school had the record attendance, 115 coaches from 16 states and Canada. The following report on Barry's course, and also on those given by Dave Kerr, Everett Case of Frankfort, Ind., H.S., and Clifford Wells of Logansport H.S., has been prepared by Mr. Wells himself.

COACH BARRY is a strong advocate of the complete elimination of the center tip-off. The game was played this way in the Pacific Coast Conference

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last year, and the success of the venture was undoubtedly a factor in deciding the National Basketball Committee to make the compromise for 1935-36 which calls for the elimination of the center tip-off after made free-throws.

"The new game proved to be very popular on the Coast," Barry said, "as it made for more action and free scoring. It gave the small speedier man a more equal chance against the big man—at least as far as getting the jump on the tip-off, and gaining possession of the ball after it has been tapped, was concerned."

Barry believes that the new game, with the pivot man restricted to three seconds

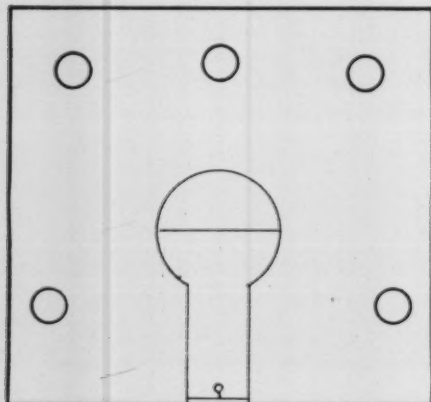


DIAGRAM A

dribble then pass or dribble all the way in if 2 and 5 have succeeded in confounding whatever defense the opponents have managed to set up quickly.

Diagram B shows a similar situation in which the guard taking the ball out of bound passes first to the opposite side, to his left instead of his right.

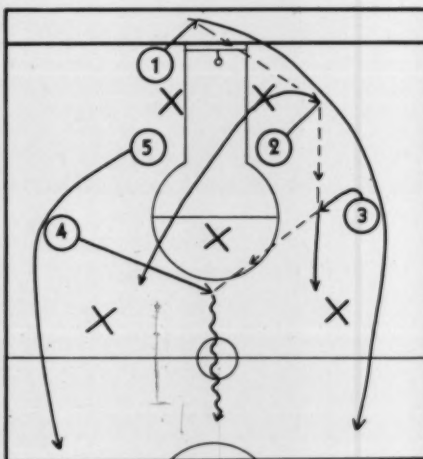


DIAGRAM B

The ball goes from 1 to 2 (moving toward the corner) to 3, who pulls up to meet it if he has to. 1 fast-breaks after his pass-in. 5 fast-breaks down the opposite side. 2 travels down the middle after his part in the preliminaries.

Suggestions for the use of the pivot man under his new restrictions were given by Dave Kerr. One of these is incorporated in Diagram C. Suppose that Player No. 2 has the ball. He may elect to play with 1 or 3. If he fakes the pass to 1, then 3 knows that he is going to play with him (3). This is the signal for 5 to slide into the free-throw lane in the usual pivot position, arriving there just in time to receive the pass from 3 (or 1, if 2's fake was to 3). 2 criss-crosses in front of 3, 3 cuts in and down, and the usual pivot-post situation is on, and if properly timed, can bring good results in the allotted three seconds, with time to spare. When 5 cannot make an instantaneous pass to the

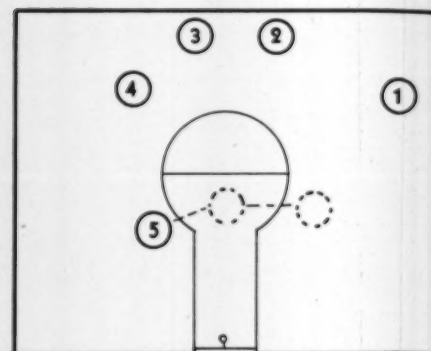


DIAGRAM C

players cutting down past each side of him, he has a number of "releases" at his command. Diagram D shows the criss-cross, how 4 can move into what would usually be an open area (cleared by the cyclonic movement of 3 and 2 down toward the basket), and the availability of 1 for a cut in, out or sideways. Or 5 himself has the usual standing invitation to shoot or dribble out, if the occasion warrants. It ought not to take him longer than three seconds to choose his play and be on with it.

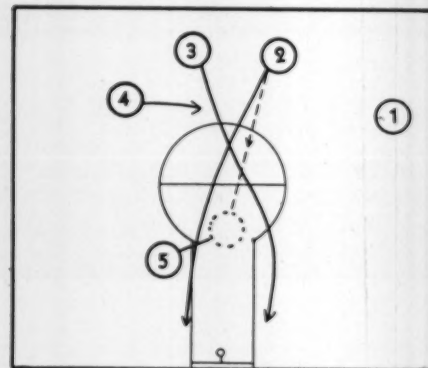


DIAGRAM D

Everett Case gave a demonstration of fundamentals and play situations with his Frankfort High School squad. He suggested a pivot-post with the pivot man standing just to the side of the lane, as in Diagram E. 2 passes in to 5, the pivot man, and the stage is set for numerous screen situations, and openings made through sheer deception and speed. After his pass-in, 2 may be able to lose his guard on a man-to-man defense by a break toward the sideline, or a fake with his right foot, and a cut-back. If the guard is still with him, he may be able to jam him up in the close cut-across the pivot man (5). 3 comes

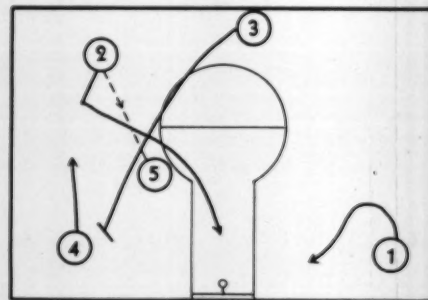
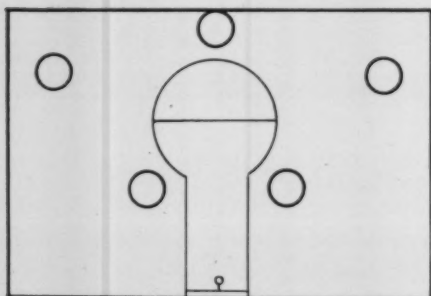


DIAGRAM E

"The new restrictions on the pivot man will bring this offensive set-up into still greater use."—Sam Barry.

in the free-throw lane whether or not he has possession of the ball, will tend to lessen the effectiveness of the zone defense. He sees the offensive set-up of three men out and two in each corner coming into greater use.

Barry also sees the double pivot becoming more popular, which a team can easily fit into its three-out-two-in formation.



The double pivot will become more popular

Fast-break plays after a successful free throw were diagrammed by Barry. Two of them are shown in Diagrams A and B.

Diagram A. One of the guards, Player No. 1 in this instance, jumps out of bounds and passes to 4 who comes in to meet the pass. 3 cuts and receives pass from 4 as he goes down. 5 breaks for the middle and goes down the center lane on the fast break, while 2 cuts in behind 5 toward the sideline and goes down the side to make the 3-man fast break for the goal. 4 and 1, the trailers, are in good defensive positions on the play. The play, of course, is not standardized. After 3 receives the ball he may dribble or pass at once, or

in, and either receives a pass from 5, or, if he does not, screens for 4 who makes a short cut out and may be set just right to receive a pass, and execute a quick turn and shot at the basket.

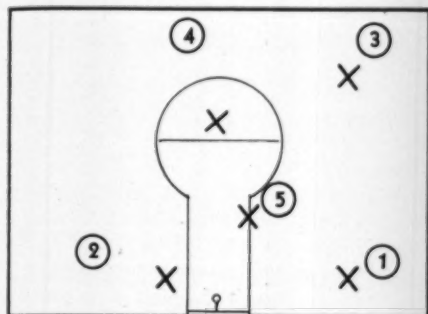


DIAGRAM F

My own Logansport H. S. team put on demonstrations of fundamentals, and showed the defense which we favor. Diagram F and the following description attempt to explain it. The offensive players are shown by numbers in circles, and the defense by Xs. 1, 5 and 3, in this particular set-up, are played man-for-man, while the guards playing 2 and 4 slide away from their men and play a sliding zone to pick up any one who might get loose going under the goal. Should 3 pass the ball to 4 the shift in defense would be man-for-man on 5, 2 and 4, and loose in a sliding zone on 1 and 3. The guard on 5 would play always to the inside of the pivot.

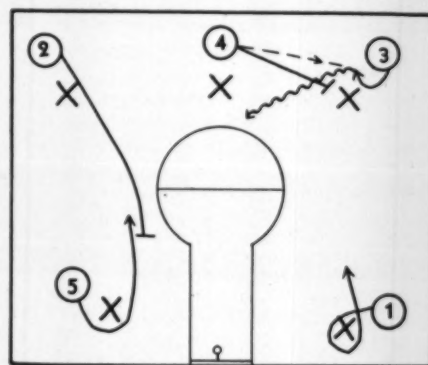


DIAGRAM G

One offensive set-up given by the Logansport team is shown in Diagram G. 4 passes the ball to 3 and blocks for 3 as he dribbles in toward the middle of the court, or all the way in for the pivot possibility. If he does not dribble in to become the pivot man with the ball, he has alternatives which 1, 5 and 2 make available when they recognize the intent of 3. In fact, the pass from 4 to 3 can be an automatic signal. 2 cuts for the basket and screens for 5 as he does so. 5 circumvents his guard by the cut-around shown, and 1 performs a similar maneuver on his guard. All the defensive men are kept busy, and when they are kept this way they are much more likely to get in one another's way than if one or two were left unharried with nothing to do but look for the switch they will make to spoil your screens.



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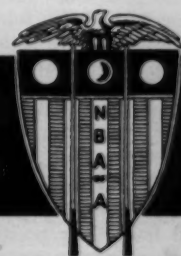
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Adrian H. "Ad" Lindsey

Head Coach, Univ. of Kansas

Ad Lindsey, Larry Moon Mullens of St. Benedict's College, Andy Kerr of Colgate, Fred Swan, assistant to Warner at Temple; Ernest Bearg of Washburn and his assistant, Elmer Holm; gave the football courses at the third annual Kansas High School A.A. Coaching School. The basketball was in the hands of Clifford Wells, Logansport, Ind., H.S.; A. A. Schabinger, former basketball coach at Creighton Univ.; and Chuck Taylor of Converse Rubber Co. Pat Mason of Rockhurst College gave the courses on baseball; Fran Welch of Emporia Teachers, and Ward Hazlett of Kansas State, on track and field; and Earl Kauffman, Washburn trainer, on injuries. The following report on several of the football courses was prepared by E. B. Weaver of Topeka High School, secretary of the Kansas High School Athletic Coaches' Association.

COACH Lindsey gave the following details of punting the ball and diagram and explanation of the short punt formation:

In getting ready to make the kick, the punter should stand with his right foot, if right-footed kicker, a little to the rear of his left foot, feet apart a little, comfortable stance. If the punter wants to kick straight down the field his left toe should be pointed straight ahead, if the ball is to be kicked to the left, his left toe should be pointed in that direction, if the ball is to be kicked to the right his left toe should be pointed to the right. It is necessary to point the toe more left when kicking left than it is to point right when kicking to the right.

The punt should be delivered in four counts. The steps to be used—a short right step, a regular left step and the ball is kicked with the right foot. The counts should be as follows: (1) from the center (2) right step, (3) left step, (4) ball is kicked. The time consumed should not exceed more than two seconds.

The foot should strike the ball, knee high, the ball almost straight on the foot, pointed in slightly and nosed down a little. The left foot must remain on the ground when the ball is kicked. If the kicker is long legged, he should kick the ball farther out in front of him than would a short legged kicker.

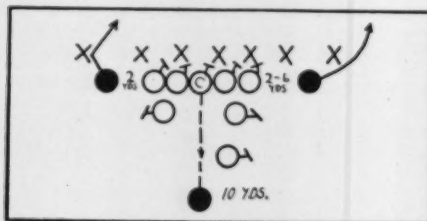
On lining up for the short-punt formation the ends should play out from the tackles the left end out about two yards, the right end out from two to six yards. The five center players—tackles, guards, and center—should block the three defensive players (guards and center). On the snap of the ball the four center players point in toward the center to form a wedge and keep a tight line.

The fullback plays the left side, and close behind the line at the seam formed by his own left tackle and guard.

The up player on the right plays the seam formed by his right tackle and right guard close to the line.

The back player on the right plays a little to the inside and about 1½ yards behind the up man. When the ball is snapped, all point a little to the outside and hold their position, using a shoulder block when the opponents come in.

The kicker should be back ten yards. The left end may have to check-block before going down under the punt.



Ad Lindsey's Short Punt

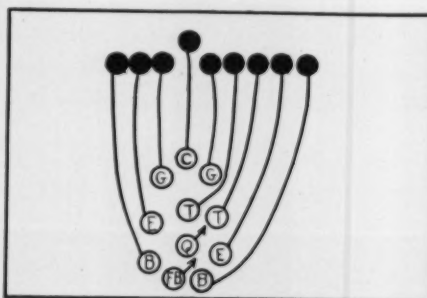
As soon as the ball is snapped the 4 center linemen take a short forward step and point to the inside and block all the spaces. The three blocking backs must not allow any defensive men to slide on the inside. Against a 6-man line the center can go down early, allowing the guards and tackles to do the major part of the blocking.

Andy Kerr

Head Coach, Colgate Univ.

Andy Kerr's football course, as given at Northeastern Univ. Coaching School in Boston, was reported in the September Scholastic Coach. One of the points not covered in that report was in connection with the huddle and line shift used by Kerr at Colgate. Herewith Mr. Weaver reports on this.—Editor.

The players all surround the center who takes his stance about five yards back of the ball. The center remains closest to the ball, and stays somewhat out of the huddle formation—about a yard out of it, in front of the guards. The inside tackle and quarterback go to the inside of the circle. The quarterback gives the signal, then says "got it," and then the center turns and gets over the ball. As he is walking up to the ball the quarterback says "hike,"



Kerr's Huddle and Line Shift

whereupon all the other players move toward the line of scrimmage, the players who have to turn making a right-about face. All players except the quarterback and the fullback keep going until they get within a yard of the line of scrimmage, where they stop in a line, shoulder to shoulder, hands on knees, body bent forward. Eight men are now in this line—left wingback, left end, left guard, right guard, inside tackle, outside tackle, right end, right wingback. The quarterback and the fullback are behind in their relative positions one yard further back than they will be at the end of the next (and final) shift. The quarterback now says "hike" again, and the players, using a cross-over step and a hop move to whatever forma-

tion is on. The diagram shows a split between the two guards on the eight-man line, but there need be no appreciable space between them.

This huddle is easy to learn and when the players are lined up, eight in the line, the next move is a sort of shift which adds color to the team.

If they want to shift into a single wingback at the finish, then the left wingback lags behind, as does the fullback, and takes up his approximate position. If the line is to shift to the left, the outside tackle lines up on the other side in the huddle between the guard and end and the right wingback lags behind.

Fred Swan

Line Coach, Temple Univ.

Blocking. In all blocking the blocker must go where he expects to find the opponent. Blockers often fail in their objective because they do not make allowance for the movement of the opponent. This is a very important fine point to emphasize, and one not usually mentioned.

When a back and a guard block a defensive end, they come out fast, under controlled speed, to put on a shoulder block, their heads up, shoulders up, hips low, feet spread. Block with the head down the field; use the forearm, elbow bent to widen the blocking surface; get contact and keep contact by fast choppy steps.

On a waiting end the crab-walk block can be used. Shoot the body in front of the end, bring the leg up with bended knee between the defensive end's legs, hands on the ground. In this position the blocker crab-walks to keep contact.

Another block used against a defensive end is the one-two block. The quarter puts on a body block, knee between the end's legs; the guard comes out fast and dives over his own quarterback and puts on a hook-knee block.

Elmer Holm

Line Coach, Washburn College

Elmer Holm explained two types of line blocks which he called the "side-body charge" and the "side-body block." It is the same fundamental block, the only difference being that in the side-body charge the blocker is very aggressive and keeps forcing his opponent, while in the side-body block he gets contact and holds his block by a leg or elbow clamp, or both.

After passing the ball, in the very next motion the center steps forward with the foot nearer the direction he desires to go, throwing this leg well in between the opponent's legs as the step is made. He quickly turns his back to the opponent, throwing the hips into the opponent's middle, whipping the other leg up and around to form a pocket which is effective for holding the opponent out of the play. The whip leg comes up waist high or nearly so. The blocker will then, at the completion of the block, have his inside hand down on the ground for support, and the other arm free.

Carl Snavely

Head Coach, Univ. of North Carolina

Carl Snavely gave the football course, and George Shepard, also of the Univ. of North Carolina staff, the basketball course at the Univ. of North Carolina Coaching School. Eighty-eight coaches attended, coming from seventeen states. The following excerpts from Coach Snavely's course were prepared by Harry Montgomery, captain of the 1935 Univ. of North Carolina football team.

Coach Snavely took up the four commonly used offensive formations, and offered his comment on the strength and weakness of each.

The single wingback, unbalanced line. This is the formation North Carolina uses.

1. Strength

- Strong side buck
- Off tackle
- Quick opening
- Long end run
- Short end run
- Quick kick

2. Weakness

- 3-man down passing attack
- Outside tackle on the weak side

Box, or Notre Dame (balanced line).

1. Strength

- End run
- Reverse
- Passing

2. Weakness

- Requires high speed to execute
- Outside tackle on the weak side
- Base of operation rather narrow

Double wingback (unbalanced line)

1. Strength

- Reverses
- Fake reverses
- Passing

2. Weaknesses

- No maximum power in three widely separated points
- Difficult timing between line and backs

Short kick formation

1. Strength

- Tackle smash
- End run
- Passing
- Cut-back
- Kicking

2. Weakness

- Straight ahead
- Good punter needed for success
- No deception in backfield

The coach should be guided in the formation he selects by the type of players at his disposal. The use of a number of formations as a means of deception is becoming more common, but a coach must have a team of exceptionally good players and reserves in order to carry out such strategy and make it effective. The teaching task alone becomes quite heavy. High school coaches usually do not have the players, nor do they have the coaching assistance, to permit the use of more than one basic formation, and a kick formation.

KICK-OFF!

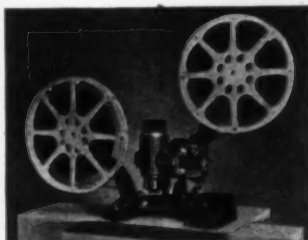
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Neilson and Cozens Achievement Scales

NEILSON and Cozens of California, after testing more than 79,000 boys and girls, developed a series of thirty-three achievement scales for boys and twenty for girls, set up according to scientific statistical procedure.¹ They believed that there is need for a series of scientifically determined achievement scales to serve the following purposes:

1. To stimulate pupils to have an interest in all-round physical development;
2. To interest pupils in their play through a fair evaluation of their efforts;
3. To supplement the routine physical examination by finding pupils' strengths, weaknesses, and skill status so that an activity program may be adapted to their needs;
4. To measure pupils' improvement in skills; and
5. To aid in further research and experimentation in the physical education field.

The authors realized that many factors would influence performance to some extent. In the construction of a classification plan, only those causal factors were taken into consideration which determine capacity and which the individual cannot quickly and willfully modify.

The factors used were the same as those advocated by Charles H. McCloy², being height, age and weight. The classification table utilizing these three factors, for the placement of both boys and girls, appears in the next column.

¹N. P. Neilson and Frederick W. Cozens. *Achievement Scales in Physical Education Activities*. New York: A. S. Barnes and Co. 1934.

²Charles H. McCloy. *The Measurement of Athletic Power*. New York: A. S. Barnes and Co., 1934. P. 88.

The scores given in different activities have been reduced to the same type of unit of measurement, so that a score on one scale has the same relative value as the same score on any other scale. The scales assign points ranging from one to one hundred.

In order to evaluate achievement scores in terms of the percentage of pupils above or below a given score, the following table can be used:

| Scores | Position of Score | Scores | Position of Score |
|--------|-------------------|--------|-------------------|
| 95 | Upper 1/4 of 1% | 45 | Lower 38.25% |
| 90 | Upper 0.8 of 1% | 40 | Lower 27.5% |
| 89 | Upper 1% | 35 | Lower 18.5% |
| 85 | Upper 1.8% | 30 | Lower 11.5% |
| 84 | Upper 2% | 25 | Lower 6.67% |
| 81 | Upper 3% | 20 | Lower 3.6% |
| 80 | Upper 3.6% | 19 | Lower 3.0% |
| 75 | Upper 6.67% | 16 | Lower 2.0% |
| 70 | Upper 11.5% | 15 | Lower 1.8% |
| 65 | Upper 18.5% | 11 | Lower 1.0% |
| 60 | Upper 27.5% | 10 | Lower 0.8 of 1% |
| 55 | Upper 38.25% | 5 | Lower 1/4 of 1% |

Example: A boy making a score of 70 will stand in the upper 11.5 percent in relation to all those who take the same test; that is, only 11.5 percent of the boys (chosen at random) who take the test will do as well or better.

Chart Classifying Boys and Girls in Physical Achievement Program

| Exponent | Height in Inches | Age in Years and Months | Weight in Pounds |
|----------|------------------|-------------------------|------------------|
| 1 | 50 to 51 | 10 to 10-5 | 60 to 65 |
| 2 | 52 to 53 | 10-6 to 10-11 | 66 to 70 |
| 3 | | 11 to 11-5 | 71 to 75 |
| 4 | 54 to 55 | 11-6 to 11-11 | 76 to 80 |
| 5 | | 12 to 12-5 | 81 to 85 |
| 6 | 56 to 57 | 12-6 to 12-11 | 86 to 90 |
| 7 | | 13 to 13-5 | 91 to 95 |
| 8 | 58 to 59 | 13-6 to 13-11 | 96 to 100 |
| 9 | | 14 to 14-5 | 101 to 105 |
| 10 | 60 to 61 | 14-6 to 14-11 | 106 to 110 |
| 11 | | 15 to 15-5 | 111 to 115 |
| 12 | 62 to 63 | 15-6 to 15-11 | 116 to 120 |
| 13 | | 16 to 16-5 | 121 to 125 |
| 14 | 64 to 65 | 16-6 to 16-11 | 126 to 130 |
| 15 | 66 to 67 | 17 to 17-5 | 131 to 133 |
| 16 | 68 | 17-6 to 17-11 | 134 to 136 |
| 17 | 69 & Over | 18 and Over | 137 & Over |



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The use of the chart for classifying pupils, is illustrated by the following example:

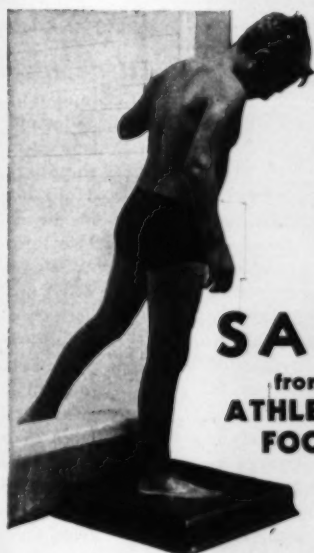
Height— Exp.
59 inches 8
Age—14 years
and 2 months 9
Weight—
112 pounds11
Sum of Exponents28
Pupil is in
ClassE

| Sum of Exponents | Class |
|------------------|-------|
| 9 & Below | A |
| 10 to 14 | B |
| 15 to 19 | C |
| 20 to 24 | D |
| 25 to 29 | E |
| 30 to 34 | F |
| 35 to 38 | G |
| 39 & Above | H |

Events:

Boys: Ball put, Base-running, Basketball throw for distance, Basketball throw for goal, Basketball throw for goal (special event), Hobble race, Jump and reach, Playground baseball throw for accuracy, Playground baseball throw for distance, Potato race, Pull-up, Push-up, Run and catch, Run—40 yards, Run—50 yards, Run—60 yards, Run—75 yards, Running broad hop, Running broad jump, Running high jump, Soccer dribble, Soccer kick for distance, Soccer place kick for accuracy, Soccer throw-in for distance, Standing broad hop, Standing broad jump, Standing broad step, Standing double broad jump, Standing hop, step and jump, Standing leap and jump, Standing three hops, Standing triple broad jump, Standing whole hammon.

Girls: Base-running, Basketball throw for distance, Basketball throw for goal, Hobble race, Jump and reach, Playground baseball throw for accuracy, Playground baseball throw for distance, Potato race, Run and catch, Run—40 yards, Run—50 yards, Run 60 yards, Soccer dribble, Soccer kick for distance, Soccer place kick for accuracy, Soccer throw-in for distance, Standing broad hop, Standing broad step, Standing leap and jump, Standing three hops.

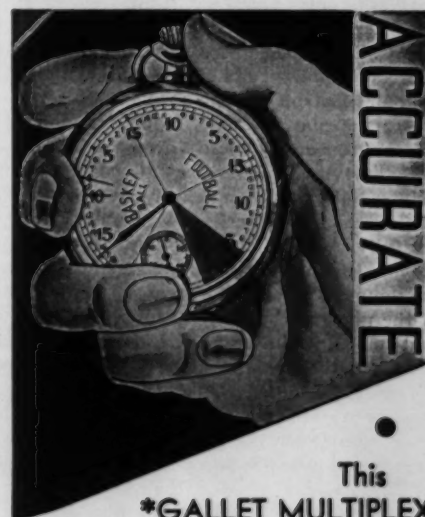


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GENERAL DEFENSIVE PLAY OF THE LINE

By Harold C. Prudhom

Mr. Prudhom, line coach at the Altus, Oklahoma, High School, uses outlines of this kind for distribution among his linemen so that they may have them for reference off the field. In the October 1934 issue of *Scholastic Coach*, Mr. Prudhom presented his outline "General Offensive Play of the Line."

Principles of Defensive Line Play

The four principles of defensive line play are:

GET PENETRATION. This means getting across the line of scrimmage by a fast charge, and the use of the hands.

PROTECT YOUR OWN TERRITORY. This means to charge straight across and not slice at an angle. If necessary to retreat, go back over own territory. Keep opponents away from your body with use of hands and elbows pushing against the base of their necks.

FOLLOW THE BALL. This means that after the defensive lineman has protected his own territory, he then follows the ball-carrier by the shortest possible route and does not stop until the whistle blows.

TACKLE. Linemen must be good tacklers, for when the ball-carrier comes within their reach they are expected to get him. But they must also be good defensive blockers or "upsetters." That is, they render most valuable service by upsetting the interference which precedes the ball-carrier, thus depriving the ball-carrier of protection and clearing the way for other defensive men to make the tackle.

Styles of Defensive Line Play

There are two general styles of defensive line play, both of which have strong supporters among leading coaches: (1) the charging line, and (2) the waiting line. The charging defensive lineman takes a stance similar to that of the offensive lineman; crouches with one foot slightly in front of the other, good balance, legs well under the body, and tries to get penetration to upset the interference or make the tackle behind the line of scrimmage. The waiting lineman assumes a higher crouching stance, with the hands out, and awaits the charge. His aim is to hold the offensive man or men off and to protect his territory, and when he sees where the play is going, to meet it square on if it is coming at him, or to surge or drift over to meet it.

Both styles of defensive line play have their strong and weak points, but most high school coaches will find that most of their players are not experienced enough to play the waiting style successfully. A hard charging line is better suited to the high school player. It is aggressive play, and for this reason alone appeals to the younger player. Moreover, regardless of the age or experience of the player, there is no gainsaying the fact that a defensive line that makes its initial charge hard and fierce, and is thus able to frustrate the designs of the offensive linemen, is at a decided advantage. But, on the other hand, if the defensive line cannot excel or equal the charge of the offense, it invites the criticism of those who favor the waiting style. Even with the waiting style, most teams using it have their guards make the quick charge at all times, and when with their backs to the wall in their own 20-yard area, have the whole line play the charging style.

A combination of the charging and waiting styles is sometimes suggested for linemen who seem to be not very successful at either as an exclusive practice. Humorously, it may be said that a charging lineman, when he cannot get through, becomes in fact a "waiting lineman." Humor aside, however, it is possible for the clever lineman, frustrated in his charge, to finesse his way to freedom by footwork and handwork. Again, this requires a player of some experience and considerable natural talent. From all angles it would seem that the low crouch and the hard fast charging style is the better for the average high school lineman.

Defensive Stance

There are two general stances used by defensive linemen. Some coaches prefer a three- or four-point stance at all times, while others prefer a higher crouching stance with the hands extended.

Linemen playing the waiting style of play use the higher

crouching stance, while the charging linemen use either the higher crouching stance or a three- or four-point stance. Guards are nearly always coached to use the three- and four-point stance. The higher stance is advocated because better vision is claimed. However, with a correct three-point stance, after the first step the body has been raised as high as though it had been in the higher stance, and has the advantage of a faster and an upward charge for getting the jump on the opponent.

Use of hands

While some college coaches (notably Lou Little of Columbia) teach defensive linemen to make their charge and gain their ground by a forceful charge which does not call for the play of the hands on the opponent, this style can be put down as the exception; and even so the defensive players must know how to use their hands for the more open work after they have made their charge. Besides the use of the hands to ward off opponents, defensive linemen can use their hands to advantage on occasion by pushing a teammate in front of the running interference, to upset it. This is an especially useful maneuver for the high school team where the players have a tendency to stand around and admire the workings of the offense. These admiring standees can often be pushed by a more alert teammate directly into the oncoming phalanx of interferers, or into the ball-carrier himself.

Following the Ball

Every man on the defense should move in a line toward the man with the ball, from the time the ball is snapped until the whistle is blown. At that time no defensive lineman should be very far away. Emphasize this in scrimmage drills. When the whistle is blown have every man stop in his tracks and demand an explanation from every man who is not as close as he should be.

Variety of Defensive Attack

Attack against a single opponent

1. Stand and divert charge with hands.
 - a. Sidestep and head pull. When opponent charges, blindly feint a charge then sidestep and grasp him by the neck and shoulders and pull him through past you.
 - b. Hold him off by stiff-arming him in the face, then shove his head aside and go on through.
 - c. Use limp leg as opponent charges into it, and slip by him.
 - d. When opponent charges low and off balance pull him forward on his face, or shove his head down to the ground.
2. Outcharge offensive lineman.
 - a. Sometimes "bull" through with sheer power and speed.
 - b. Submarine. Hurl the head and shoulders at opponent's legs and bust on through. This is especially effective for short guards playing against tall men.
 - c. Dive over an opponent playing low.
 - d. Straight-arm charge. Grasp his head and pull or throw him off balance.
 - e. Flank charge. Fake a charge, stop and then hit opponent from side.

Attack against two opponents

- a. Double coordination. This consists of using the hands on the head of one opponent and dropping the opposite knee to the ground so that the other offensive man can not ride you out. The elbow may also be used.
- b. Split opponents by using hands on opponents' heads and and spreading them apart.
- c. Feint and head pull. Feint a charge between opponents, then step back and grab one by the head and pull him across in front of the other.
2. Diving over. Sometimes when opponents are charging low you can dive over them and tackle runner or light on hands.
3. Submarine. This consists of getting the arms and head past the offensive linemen's legs so that you are in a position to make a tackle. Keep low so they can not get under you and

keep digging with feet. You must get the jump. This maneuver is used by guards when they expect the play to come over them.

Riding the Guard

When playing against a running guard you should always charge in fast, and if he pulls out, charge through the hole he has vacated. Charge in fast and slap to the ground the man intended to block the hole, and then follow as closely as possible the guard who has pulled out, as he will lead the interference. If fast enough you may be able to get hold of his pants.

Pulling Out With a Guard

This is another method of having the running guard direct you to the point of attack. First, charge forward; then if the guard pulls out, step back and charge around behind your own line, keeping your eye on the running guard, as he will lead you to the path of the ball. This can be used effectively when you are blocked by the offensive lineman who has plugged the hole of the running guard.

Crossing Up an Assignment

Most teams on offense have their men assigned to block certain defensive men. By crossing up the assignment they can often be thrown in confusion. This is done between tackles and ends. The end smashes in to the tackle's territory while the tackle drifts out and covers the end's territory. In this way the end generally gets behind the offensive end and the tackle also slips away from him. Some teams shift their tackles and ends on defense in order to play this style. Others use it only occasionally, and it is made up between tackle and end at the moment. When this maneuver is to be executed, the end lines up fairly close and the tackle fairly wide. This style of play works best against punt or semi-punt formations, where the ball-carrier plays some distance behind the line of scrimmage and who receives the ball standing.

Sagging Tackle

The sagging tackle on the short side is a very effective way for backing up the line, especially against a team which uses few cut-back or reverse plays.

By this method the short side defensive end charges in, watching for reverse plays. The tackle does not charge. He stands higher and holds the defensive end off with his hands until he sees where the play is going. He then backs up the line on bucks, cuts across back of the line on opposite end runs, and helps cover short side and back of line on passes. This is more effective against teams who send their short side end through for the secondary, for this means that the play will go to the other side.

Defense against Passes

When you are blocked on your initial charge and you see that the offense is going to pass, pull back and cover the territory close to you back of the line. Tackles can often break up short passes made just across the line of scrimmage. Watch the passer and you can tell where he is going to pass. As soon as you can tell where the pass is going, hurry to the spot. If it is completed you can tackle the receiver and if it is intercepted you can run interference. Always rush the passer if possible.

Defense against Punts

When you are sure opponents are going to punt stand up higher and charge fast, using hands to try to knife through and block kick. Watch for quarterback sneak. Line plays wide apart and all charge in to block punt.

With the center in the line the center or a guard tries to pull opposing center through while teammate goes through hole. An end and tackle on the weak side can also team up. The tackle charges straight across drawing the weak side back out while the end cuts in close behind him to block the punt.

Defense When Opponents Are Close to Your Goal

Guards dive lengthwise throwing body parallel to the line of scrimmage. The body is held as high as possible with the elbow and foot resting on the ground and the body rigid. The head is thrown towards the center with back to opponents with the upper leg raised high and rigid. This piles up the center of the line. Center playing in the line charges the opposing center trying to upset

him, or shoves him in the path of the runner. Tackles play close and charge straight towards ball-carrier. The ends play close and crash in leaving the backfield to stop a wide sweep. Two backs are close to the line. Two others be a little wider and back, and have their eyes glued on ends and wingbacks for a forward pass.

General Defensive Tips for Linemen

1. A good defensive lineman can often save as much yardage as a good halfback can gain.
2. An experienced defensive lineman can usually tell from the first touch of contact the direction of the play by noting how the opponent is attempting to shove him; and should fight against this resistance immediately.
3. The instant the ball is snapped make charge towards apex of opponents' backfield. Get across the line of scrimmage.
4. The instant you see that the ball is not coming at you take after the ball in the shortest possible line, but watch for cut-backs and cross bucks. Follow the ball.
5. Fox opponents at times by lining up out of position and then shifting back just before the ball is snapped.
6. Always guess every play of the opponents. This will teach you to diagnose plays. Study rules of field generalship and this will help you to anticipate what your opponents will do.
7. Keep changing your tactics. Keep opponents guessing as to what you are going to do next.
8. Always shift with opposing line.
9. Seldom cut behind your own line. Always charge through fast.
10. Never under any condition lose sight of the ball.
11. Always try to get the jump on your opponent.
12. Never stop charging until you have the man with the ball or someone else has him. Never quit. Irrespressible fight, savage charge, indomitable spirit, unquenchable enthusiasm are what a lineman must have.
13. Never let opponents get to your stomach. Ward them off with your hands.
14. As a rule try to play one man at a time.
15. Watch offensive backfield for tips.
16. Don't be caught asleep by cut-backs and split bucks. If you slice you will be caught sooner or later. Protect your own territory first.
17. Know your relative position on defense against any type of offensive formation.
18. Know what style of play should be the most effective against any particular type of attack.
19. Keeping in mind the technical situation, always make up your mind ahead of time the stunt you will use on opponent.
20. Always keep in mind the tactical situation—the down, the ground to be gained, and the position on the field, and play accordingly. Come in close when a buck is expected.
 - a. On first down a power play can be expected, probably an off-tackle play. Watch out for anything in the way of a straight play, but do not be caught if a deception play is tried.
 - b. On second or third down if small yardage is needed you can expect a play inside defensive ends, probably a line buck.
 - c. If large yardage is needed on second or third down, watch for a gamble play (forward pass or trick play), or a wide end run.

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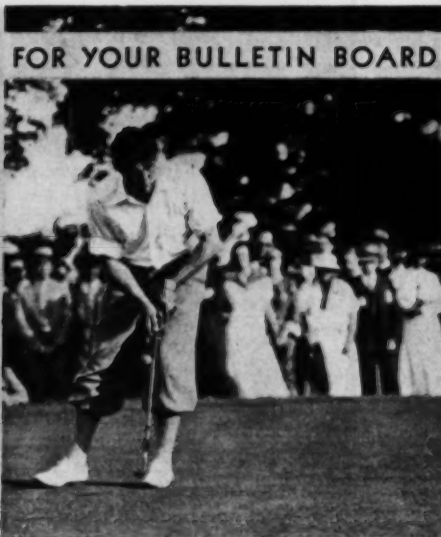
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Collett Vare, who won her sixth national championship by defeating 17-year-old Patty Berg 3 and 2 in the finals at Interlachen,

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The Fulton, Mo., high school girl setting a world's record in the 100-meter run in the

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New Books on the Sportshelf

Triumph in Fi. Ed.*

THE PHYSIOLOGY OF PHYSICAL EDUCATION. By Percy M. Dawson. Pp. 956, illustrated. Baltimore: The Williams and Wilkins Co. \$8.

THIS is an unusual book. One is inclined to suspect that often a conscientious reviewer has to resort to some kind of artificial respiration in an effort to get through 900 pages of a scientific book. This is not true here. Yet it is undoubtedly a scientific book written by an authority with a notable array of achievements; a man who first of all is a teacher trying to stimulate the dormant thinking power of his students and not just cramming them with well-cataloged and petrified knowledge. Dr. Dawson emphatically states: "I have repeatedly tried to make it clear that the student readers will have to develop their own professional viewpoint and that they must be forever trying to evaluate my factual offerings in terms of their daily tasks."

The first impression made by this volume is rather a strange one, due largely to the system of simplified spelling used by the author. Such an innovation startles the reader until he becomes accustomed to it. Then he begins to enjoy the freshness of the style and originality of treatment. The book is written in a style that is used in a lecture room after the teacher and the students have become well acquainted with each other and begin to share enthusiasm for the subject.

Dr. Dawson's profound knowledge of the subject makes it possible for him to focus the reader's attention on the most essential facts of physiology. His disregard of literary conventions enables him to summarize the long chapters in a concise and unusual manner. Take for example the summary of a discussion of Sugar Feeding in Athletics: "Yu know, Jane, its just possibl that sugar feeding during a contest has only psychologic effect." (The book is dedicated to Jane Doe, and he frequently addresses her throughout the text as though she were a real person.)

Dr. Dawson has dared to do something that probably many others have wished to do but have not had the nerve. He has written a scientific book which is not dull, which is stimulating and challenging! The publishers also deserve congratulation for their courage and strength of conviction in producing it.

It is to be expected that some science teachers with a different sense of humor and some English teachers who believe that spelling is sacrosanct, will join their efforts in anathematizing this book. Even this disturbance alone would make its publication a worthwhile undertaking.

As far as the content is concerned it would suffice to say that it is the most complete book on this subject yet published. It should be in the hands of every one in physical education.

PETER V. KARPOVICH

*Dr. Dawson's Daring Spelling for Educated Readers. See further comment about it on page 5.

Critique on football officiating

FOOTBALL OFFICIATING. Edited by E. C. Krieger. Athens, Ohio: The Lawhead Press. Pp. 96, illustrated—photographs and diagrams. \$1.

NOT since F. A. Lambert wrote *How to Officiate Football* has there been a book on the technique of officiating football. We didn't think one was needed until we read *Football Officiating* by E. C. Krieger of the Ohio Association of Football Officials. Here is a snappy little volume poignant with humor and facile writing, directed at improving the art of officiating. That there is plenty of room for improvement Referee Krieger makes plain enough. He prints convincing photographic evidence of top-ranking officials who, either through ignorance or carelessness, are shown making mistakes one would never expect of officials of their experience and class. Mr. Krieger, in his foreword, graciously explains that he does not print these pictures, which are from moving picture films, in order to discredit the persons involved, "but for the purpose of pointing out in an understandable manner some of the mistakes which all of us have made, and which we realize are to be avoided." Nevertheless, Referee Krieger has the goods on a lot of the boys. The captions for the pictures make breezy reading. All told, it's a good piece of work, and if by our emphasis on the pictorial side of the book we have led any reader to suppose that it is its main point, we hasten to say in conclusion that the book succeeds in doing what its title suggests—it tells how to officiate football games in a thorough, workmanlike manner—for referee, umpire, field judge and head linesman. The game has needed this little volume. And it's a bargain at one dollar.

JACK LIPPERT

More Krieger

QUESTIONS AND ANSWERS ON THE 1935 FOOTBALL RULES. Edited by E. C. Krieger. Athens, Ohio: The Lawhead Press. Pp. 94. Illustrated—diagrams.

THIS is the fifth annual edition of Mr. Krieger's analysis of the N.C.A.A. rules in the form of questions and answers. "More than one-half of the booklet is new," he says, "and much of the balance has been revised." There are 300 questions and answers, covering the entire range of the rules; a section giving about 15 important "Errors of the Past;" and a most interesting use of diagrams in the section "Scoring Plays" to illustrate points in the rules regarded as most difficult of interpretation. The type in which the captions for the diagrams are set should be larger. It is painfully small, and with most diagrams need not have been, because there is white space available to the side of the diagrams.

What is Referee's Krieger's answer to the current problem as to when the referee should blow his whistle to declare the ball dead while a runner is still on his feet? You recall that the N.C.A.A. rules this



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year have added a supplemental note to Rule 7, Section 7 which is believed by many to be a contradiction to Article 1 (a) of the rule proper. Article 1 (a) reads, in part: The ball is dead and shall be so declared by the Referee: When a player in possession and control of the ball . . . cries 'down,' or is so held that his forward progress is stopped . . ." The supplemental note which seems to confuse this reads: "A runner who is on his feet even though he be held by an opponent may run, pass, or kick until the whistle is blown."

Supporters of the rule and the note as they now stand point out that the note does not contain the phrase "forward progress," and therefore does not apply to a player whose forward progress has been stopped. They say that the ball in that player's hands should always be blown dead by the referee. Their answer is definite, but Mr. Krieger's answer is not at all satisfactory. Here is his question and answer:

Is the ball dead when the runner is in the grasp of an opponent and his forward progress is stopped?

Answer—If the runner is still on his feet and the whistle has not blown, it is a matter of judgment on the part of the officials.

The new Supplemental Note, Page 35, constitutes a rule change of a fundamental nature and is a considerable departure from the rules governing dead ball which have been in effect during the past three seasons.

The purpose of this Note is patently to allow the runner more freedom in breaking loose and particularly to allow more latitude in the throwing of both forward

and backward passes; and unless it fosters undue unnecessary roughness it may help to open up the game.

But Mr. Krieger, with all these words, is still dodging the issue. Maybe he has to see the situation before he can rule on it. But here is one common situation on which he might have ruled:

The ball-carrier crosses the line of scrimmage and just as he is being tackled by a secondary, he pivots and gives his back to the secondary, who grabs the ball-carrier and unmistakably stops his forward progress. Yet the ball-carrier is still on his feet, in full control of his arms, in good body balance, and may even be smiling as he tosses the ball back to a teammate who tears away for a touchdown. His forward progress was stopped when he made the throw, and he didn't seem to mind it especially, because he was counting on making that backward pass. It was planned that way. And the officials and everybody else with football sense on the scene was fully aware of the ball-carrier's intentions the moment they saw him pivot into the tackler. They saw the teammate timing his approach from the rear, and the whole thing looked like a swell bit of football. Would Mr. Krieger have blown his whistle even though this ball-carrier's forward progress was stopped? We suspect that he would have withheld it.

J. L.

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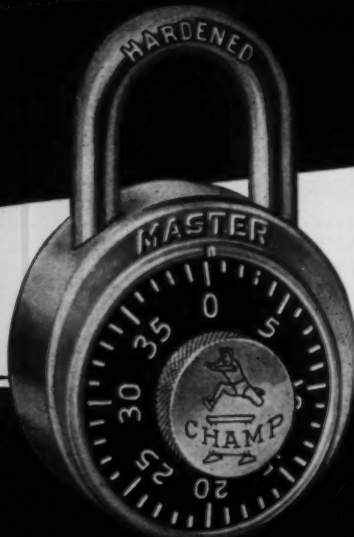
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[Continued from page 19]

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2. Essential for growth, nutrition and the utilization of proteins, carbohydrates, and fats
 3. Important bearing on resistance and immunity to disease
 4. Comparatively recent discovery—scientific knowledge limited
 5. Many natural foods rich in vitamins—Commercial preparations usually unnecessary to assure body necessary amount
 6. Effect of irradiation and sunlight on vitamin content of foods
 7. Question of storage
- E. Minerals
1. Calcium
 - a. Relation to formation of strong bones and teeth
Importance in diet of mother during pregnancy
 - b. Essential to power of contraction of muscle fibers and to response of nerve fibers
 - c. Presence in blood necessary to clotting of blood; importance in injury and operations
 - d. Constitutes larger proportion of body weight than any other inorganic element
 - e. Chief source—milk
 2. Phosphorus

Essential for life and growth of every cell—bones, blood and especially important in nerve tissue

 - b. Gives rigidity to bones and teeth and helps prevent rickets
 - c. Helps maintain alkalidity of blood
 - d. Widely distributed in foods—quart of milk daily insures abundance
 - e. Interdependence of calcium and phosphorus
 3. Iodine
 - a. Present in cells in exceedingly minute quantities
 - b. Absence causes thyroid disturbance
 - (1) When not present in drinking water, not in vegetables and fruits in certain regions
 - (2) The use of iodized salt or iodine on advice of physician
 - c. Chief sources—water, oysters, clams, fish
 4. Sulphur
 - a. Constituent of all living cells
 - b. Contained in all protein foods
 - c. Chief source—egg yolk
 5. Sodium
 - a. Found in all tissues, particularly the blood
 - b. Keeps blood at right consistency for absorption
 - c. Chief source—common salt
 6. Iron
 - a. Element of greatest importance to growth because it is the element in the hemoglobin with which oxygen combines
 - b. Forms part of every cell
 - c. Promotes growth of cells and stimulates their action
 - d. Necessary to plan definitely for iron content in food
 - e. Chief sources—egg yolk, spinach, liver
 7. Other minerals

Potassium, manganese, chlorine, silicon, zinc, copper, fluorine
Chief sources—milk, and green leafy vegetables
 - F. Water—not classed as a food in the sense that it gives energy, controls growth and regulates activity, but is a necessary constituent of many foods
- VI. ESSENTIALS FOR GOOD NUTRITION—controllable factors
- A. The selection of a balanced diet to serve the needs of the body
 1. Essentials of balanced diet
 2. Planning of daily meals
 - a. Individual selection at school or in restaurant
 - b. Family selection
 3. Simple precepts (McCullum)
 - a. "Take daily throughout life the equivalent of a quart of milk. Once a day a liberal serving of leafy green vegetables cooked. Twice a day a salad of fresh fruit or vegetables with dressing."
 - b. "Eat what you want after you have eaten what you should."
 - B. An adequate amount of food
 1. The meaning of caloric values of foods
 2. Caloric needs in relation to physical activity; age and growth; sex; climate, season, housing, clothing
 3. Effects of overeating
 - a. Overwork of digestive apparatus
 - b. Congestion of liver
 - c. Constipation—headache, fatigue, etc.
 - d. Excess protein—favors putrefactive changes in intestinal tract and irritates the kidneys
 - e. Excess fats may lead to acidosis
 - f. Possible factor in obesity
 - C. Foods—clean and well prepared
 1. Purchasing of foods from clean sources—stores, markets
 2. Cleaning of food in the home
 3. Preservation and storage of food
 4. Methods of preparation of different kinds of foods
 - D. Foods attractively served
 1. Cleanliness of dishes
 2. Attractiveness of table
 3. Atmosphere of room
 - E. Proper care of digestive tract
 1. Care of the teeth
 2. Thorough mastication
 3. Providing bulk in diet
Avoiding certain types of roughage
 4. Drinking plenty of water
 5. Avoidance of overeating
 6. Avoidance of self-prescribed laxatives
 7. Avoidance of alcohol and highly seasoned foods
 8. Avoidance of eating between meals
 9. Maintenance of good posture
 10. Avoidance of food fads
 11. Exercise to strengthen abdomen

[Turn to next page]

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- inal muscles and muscles of alimentary tract
12. Regulating physical activity with respect to time of eating
13. Control of emotions
14. Avoidance of eating when fatigued
15. Regular habits of elimination
16. Consulting physician when digestive disturbances occur
- F. Adequate rest and sleep
- G. Sunshine and fresh air
- H. Absence of infections and strains such as fatigue; low vitality following illness; worry, etc.
- I. Efficient functioning of body processes

VII. NUTRITIONAL PROBLEMS

- A. Malnourishment
 1. Some contributing causes are physical defects and pathological processes, malfunctioning of glands, undesirable health habits, faulty diet and food habits, chronic fatigue, lack of home control
 2. Essential to have individual diagnosis by physician
- B. Failure to grow according to normal expectations
 1. The need for thorough examination by physician
 2. Value of periodic measuring of height and weight as measures of growth
- C. Combating current food fads
 1. Excessive dieting
 2. Vegetarianism
 3. No breakfast
 4. Other fads
- D. Food adulteration
- E. False advertising of food values
Committee on Foods of the American Medical Association

Suggested Activities

1. When this unit is begun, have all pupils keep an accurate account for a week, (1) a daily record of the food eaten at each meal, (2) the food or drink taken between meals, and (3) selected habits in relation to eating. File these records for future use. Pupils analyze their own record after knowledge of food and habits in relation to eating have been developed. Check on (1) selection of balanced diet, (2) amount in relation to needs, and (3) habits which need improvement. Work out method for checking on improvement in practices related to nutrition. Continue study over several weeks. If practices have been improved in individual pupils note results, e.g., gain or loss of weight; gain in height; increased resistance to fatigue, freedom from constipation; freedom from infections; freedom from digestive disturbances; appetite for meals; control of appetite for sweets between meals; general feeling of well being.
2. Appoint committee to make a study of selection of food on trays in school cafeteria. Analyze for (1) selection of balanced diet, (2) adequate amount, and (3) economical expenditure of funds in terms of food values.
3. Committees report on sanitary care of foods in local (1) meat-markets, (2) grocery stores, (3) confectionery shops, and (4) markets
4. Boys discuss home gardens
5. Girls plan and prepare Sunday dinner at home. Report and discuss. Boys plan and prepare menu for hiking trip. Report and discuss.

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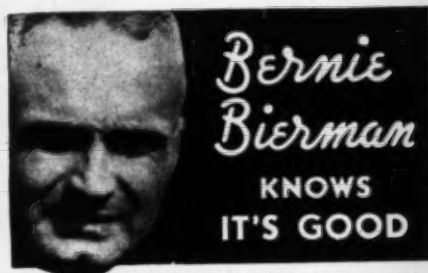
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6. Invite physical education teacher to demonstrate exercises that will strengthen abdominal muscles and prevent visceroptosis. Pupils name games they have learned which would serve similar purposes.
7. Invite dental hygienist or dentist to give talk and demonstration on the care of the teeth.
8. Committees report on school equipment and procedures which may affect nutrition. Points to be considered: (1) sanitation and care of drinking fountains; (2) the selling of candy at school; (3) the serving of milk or other lunches at school; (4) cleanliness in cafeteria; (5) the menu in the cafeteria; (6) attractiveness of cafeteria or lunch room; (7) noise in the cafeteria or lunch room; (8) time allowed for the noon meal; (9) opportunities for fresh air and sunshine at noon; (10) athletic activities at the noon hour; (11) atmosphere of the school—happy, oppressed, hurried.
9. Committees report on recent scientific investigations in the field of nutrition.
10. Pupils bring clippings from newspapers and magazines concerning (1) values of foods as advertised. (For reliable information write to the Committee on Foods of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois), (2) advice relative to problems of nutrition.
11. Invite pupils of foreign parentage to describe some favorite dishes used in their homes. Discuss food values. If facilities are available, these dishes may be prepared at school.
12. Pupils, who carry lunches to school, plan types of food which are desirable.
13. Committee investigate the control of eating places.



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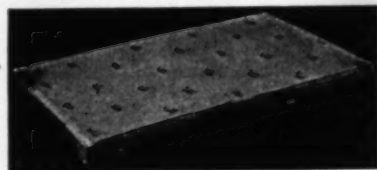
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New Swim Records

The N.C.A.A. committee on swimming records, at the request of the National Federation (high schools), has arranged scholastic swimming records in two divisions: those for public high schools, and those for prep schools. The newly approved records were announced last month, and are listed below.

NATIONAL INTERSCHOLASTIC PREP. SCHOOL 20 Yard Courses

FREE STYLE—100 yds., 0:53.3—Edwin Sabolsky, Blair Acad., Jan. 19, 1935.

RELAY RACING—300 yds., medley, 3:08.3—Mercersburg Acad., Mar. 9, 1935.

Short Courses

FREE STYLE—50 yds., 0:23.8—Wm. Farnsworth, Mercersburg Acad., March 16, 1935 (equalling record). 100 yds., 0:53.4—Edward Wood, Huntington School, Mar. 2, 1935.

BACK STROKE—100 yds., 1:00.4—Albert Vande Weghe, Hun School, Mar. 23, 1935.

RELAY RACING—150 yds., medley, 1:28.5—Mercersburg Acad., Mar. 2, 1935. 300 yds., medley, 3:12.8—Mercersburg Acad., Jan. 26, 1935.

NATIONAL INTERSCHOLASTIC HIGH SCHOOL 20-Yard Course

FREE STYLE—100 yds., 0:53.2—Matthew Chrostowski, Central H.S., Providence, R. I., Mar. 22, 1935. 440 yds., 5:02.6—Andrew Clark, Northwestern H.S., Detroit, Feb. 28, 1935.

BREAST STROKE—100 yds., 1:03.8—John Higgins, Central H.S., Providence, R. I., Mar. 22, 1935.

BACK STROKE—100 yds., 0:59.8—Adolph Kiefer, Roosevelt, Chicago, Mar. 2, 1935.

Short Courses

FREE STYLE—50 yds., 0:23.6—Matthew Chrostowski, Central H.S., Providence, R. I., Mar. 16, 1935. 100 yards. 0:53.2—Matthew Chrostowski, Central Providence, R. I., Mar. 16, 1935.

BREAST STROKE—100 yds., 1:04.2—John Higgins, Central H.S., Providence, R. I., Mar. 16, 1935.

RELAY RACING—200 yds., free style, 1:36.3—Trenton H.S., N. J., Mar. 28, 1935. 150 yds., medley, 1:26—Trenton H.S., N. J., Mar. 23, 1935. 300 yds., medley, 3:10—Central H.S., Providence, R. I., Feb. 2, 1935.

*Performances breaking the listed national A.A.U. records.

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